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THESIS

A STATISTICAL ANALYSIS OF ACTIVE DUTY
NAVY BANKRUPTCIES AT THE
JACKSONVILLE, FLORIDA AND SAN DIEGO,
CALIFORNIA BANKRUPTCY COURTS

by

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June, 1993

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A Statistical Analysis of Active Duty
Navy Bankruptcies at the
Jacksonville, Florida and San Diego,
California Bankruptcy Courts

by

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ABSTRACT

This thesis presents the results of a statistical analysis conducted on active duty Navy bankruptcy cases filed in 1991 at the Jacksonville, Florida and San Diego, California bankruptcy courts. Results are presented for over 60 variables which were analyzed for the 96 active duty Navy bankruptcy cases in the sample. In addition, it provides a detailed explanation of the processes involved in filing Chapter 7 or Chapter 13 bankruptcy. The results of the analysis indicate that active duty Navy personnel in Jacksonville and San Diego file bankruptcy more often than the civilian population. In addition, active duty Navy personnel are filing bankruptcy with a significantly lower debt burden than civilians who file bankruptcy. The results also indicate that there is little difference between the financial conditions of sailors who file bankruptcy in Jacksonville and San Diego.

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I. INTRODUCTION

A. BACKGROUND

The number of nonbusiness bankruptcies filed in the U.S. has increased 164 percent from 1985 to 1992 [Ref. 1]. In 1991, one in every 110 households in the United States filed personal bankruptcy. Figure 1 provides a graph of the number of nonbusiness bankruptcy filings during this time period. The dramatic increase in personal bankruptcies has resulted in personal bankruptcy becoming the consumer financial issue of the 1990s. In 1988, the total cost to creditors of personal bankruptcies was $12 billion, with bank credit card issuers loosing $1.5 billion [Ref. 2:p. 26]. These costs are ultimately paid by a transfer of wealth from consumers who pay their debts to those who do not. In 1988, the cost of bankruptcies per each active bank credit card account was $13; and by 1995 it is expected to reach $25 [Ref. 2:p. 26].

As personal bankruptcies increased in the civilian population, the Navy also noticed an increase in the number of sailors with financial difficulties. Although the Navy maintains no comprehensive data on sailors who file bankruptcy, the general belief of persons who worked with financially strapped sailors was that the number of sailors choosing to file bankruptcy was increasing. In 1987, the Navy and Marine Corps Relief Society gave or loaned $31 million to service members in financial difficulty. In 1991, this number had increased to $53 million, and one in seven Navy and Marine Corps personnel had received financial assistance from the society. [Ref. 3:p. 7]

In response to this, in November 1990, the Chief of Naval Operations (CNO) promulgated OPNAV instruction 1740.5 to establish a comprehensive Personal Financial Management (PFM) Education, Training, and Counseling Program. This program emphasizes personal financial responsibility by providing

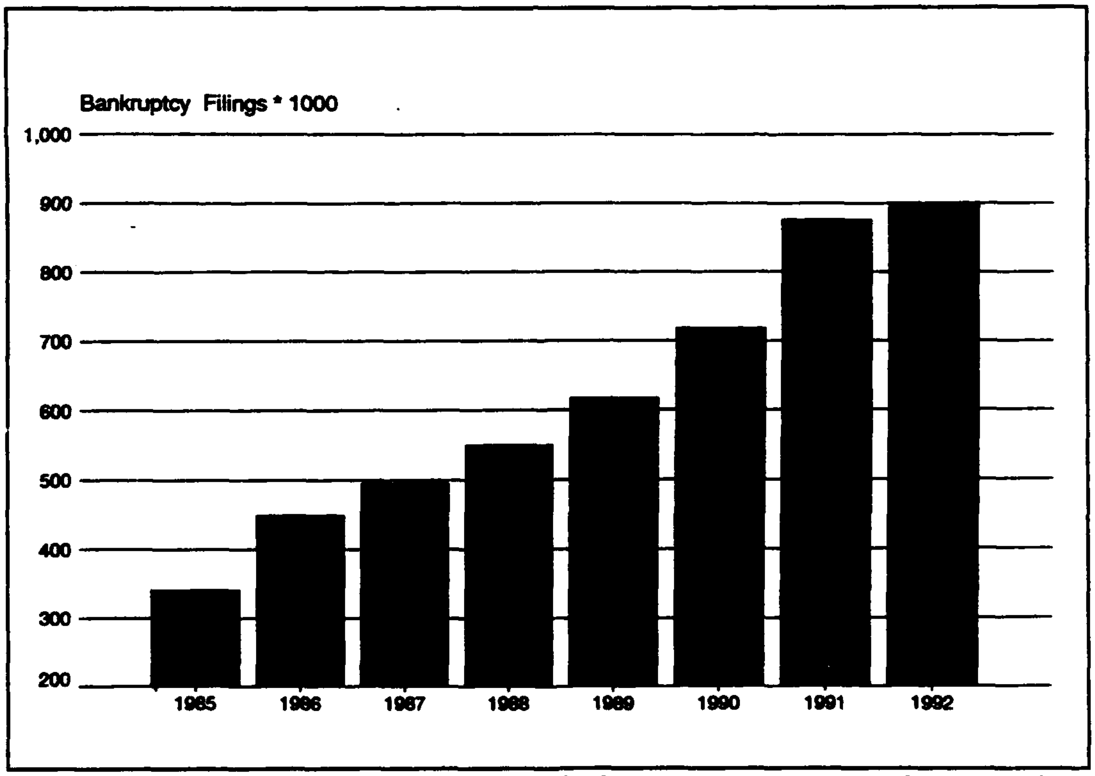

Figure 1 Total Bankruptcy Filings for the Period Ending 30 December

basic principles and practices of sound money management, counseling tools, and referral services. This instruction consolidated and standardized PFM education, training, and counseling within the Navy. [Ref. 4:p. 1] It represents the importance Navy leadership places on the financial health of its sailors.

Sailors who fail to manage their finances responsibly not only can result in bad press for the Navy, but also are security risks. Money has been a major incentive in most recent cases of espionage such as in the John Walker and Jerry Whitworth espionage cases. According to a study of 115 Americans arrested for espionage between 1945 and 1990, at least 67 percent were motivated by money. Of those with financial motivation, at least 30 percent are known to have had significant debts. [Ref. 5:p. 2]

The PFM program provides services to prevent financial problems but receives little data on the number or causes of personal bankruptcies filed by sailors. Bankruptcy petitions are filed in federal bankruptcy courts, and the Navy is only notified if they are listed as a creditor on the petition.

Much of what is known about personal bankruptcy in the U.S. comes from reports issued by the Administrative Office of the U.S. Courts. These reports are limited in scope and include only aggregate demographic data on bankruptcy filings. This information includes the number of filings, a breakdown of filings by Chapter filed, whether the case was filed singly or jointly, and whether the case is a business or nonbusiness bankruptcy. No other significant information on personal bankruptcy is regularly recorded. [Ref. 6:pp. 15-16] The only way to obtain information about the characteristics of sailors who file bankruptcy is to review the individual bankruptcy cases.

B. PURPOSE

The first purpose of this research is to identify the characteristics of sailors who file bankruptcy by conducting a statistical analysis of active duty Navy bankruptcy cases. This will help the PFM Program Manager gain a better understanding of how severe the bankruptcy problem is in the Navy. In addition, the information gathered will allow the Program Manager to evaluate the PFM program and tailor fleet wide preventive training and counseling programs as needed.

The second purpose of this research is to provide the PFM program a detailed explanation of the bankruptcy process which can be used to assist in the training of PFM counselors. The researcher had limited contact with PFM counselors in Jacksonville, Florida, and his opinion is that they did not fully understand the bankruptcy process.

The third purpose of this research is to develop a simple sampling methodology to obtain data about the characteristics of sailors who file bankruptcy. This process could be conducted at other bankruptcy courts to gain an even better understanding of how severe the bankruptcy problem is in the Navy.

C. RESEARCH QUESTION

The research question examined in this study is:

- Are the numbers of, and characteristics of personal bankruptcies filed by active duty Navy personnel different from those found in the civilian population.

D. SCOPE

The scope of this research is limited to collecting and analyzing data about active duty Navy personnel who filed bankruptcy in 1991. Other military service members and retired military were not included in the research. Active duty Navy bankruptcy cases were sampled at two locations, the Jacksonville, Florida bankruptcy court and the San Diego, California bankruptcy court. The desired sample size of active duty Navy bankruptcy cases at each location was 50. In support of this goal, over 2000 bankruptcy cases were systematically sampled to identify the desired 100 active duty Navy bankruptcy cases.

Sample locations were based on the size of the Navy population within a bankruptcy court's jurisdiction and Variable Housing Allowance (VHA) rates. It was desired to sample from a low cost of living area, Jacksonville, and a high cost of living area, San Diego, to check for any differences in bankruptcy filings between the two areas. The VHA rates for the areas were used as measures of the cost of living in the two sample locations.

E. METHODOLOGY

The methodology that was followed drew from two previous bankruptcy studies. The first, a small study conducted in 1988 by COMNAVAIRPAC on Navy and Marine Corps bankruptcies filed at the San Diego bankruptcy court [Ref. 7]. The second, the 1981 Consumer Bankruptcy Project, a large seven year project which involved over a quarter million pieces of information about consumer bankruptcies [Ref. 6]. The results of these studies were adjusted using Consumer Price Indices and used for comparison purposes with the researcher's results.

The study conducted was a microdata one in which data was collected and analyzed on the characteristics of Navy debtors. Data was recorded on their assets, liabilities, income, expenses, and various personal characteristics. Bankruptcy cases were sampled using systematic sampling which is a good approximation of simple random sampling. This permitted generalizations to be made about the populations from which the samples were drawn.

Prior to traveling to the sample locations, a three day pilot study was conducted at the San Jose, California bankruptcy court. The purpose of the pilot study was to test the researcher's sampling procedure and gain an understanding of the time required to locate and record the information in an active duty Navy bankruptcy case. The results obtained from the pilot study were a key variable in determining the sample size.

The researcher spent one week at the Jacksonville bankruptcy court gathering information. In San Diego, the researcher was required to sample cases at both the San Diego bankruptcy court and the Federal Records Warehouse in Laguna-Niguel, California. This was required to ensure that all the 1991 bankruptcy cases were systematically sampled. The data was then coded and analyzed on a personal computer. The software package used for analyzing the data was SPSS for Windows, Release Five.

F. ORGANIZATION OF THE STUDY

This thesis is organized into six chapters. Chapter I provides a general introduction to the area of research. Chapters II and III discuss the evolution of bankruptcy law and the process involved in filing Chapter 7 or Chapter 13 bankruptcy. These chapters will provide the reader who has little knowledge of bankruptcy an understanding of the bankruptcy process and the context in which it operates. Chapter IV details the methodology employed in developing the sampling routine and collecting the data. Chapter V presents the analysis and discussion of the results obtained from the approximately 60 variables analyzed. Where appropriate, the results of the researcher's samples are compared with other bankruptcy studies. Chapter VI presents the conclusions reached as a result of the research. In addition, it makes suggestions for areas of future research.

II. HISTORICAL REVIEW OF BANKRUPTCY LAW

A. EARLY BANKRUPTCY LAW

The seeds of contemporary bankruptcy law can be traced back to biblical jubilees, a forgiveness of debt every seven years. [Ref. 6:p. 4] They were intended to allow a debtor to put his debts behind himself and begin life with a "fresh start."[1] This notion of a fresh start for a debtor has persisted through time and is one of the fundamental pillars of present day bankruptcy law.

The word "bankruptcy" has its roots in the Latin word for "bench" and "break"; its literal meaning is "broken bench." Under ancient Roman law, creditors would divide the assets of a debtor, and then physically break the debtor's workbench as punishment. Bankruptcy was regarded as fraud and debtors were often deprived of their civil rights. In addition, they were often stigmatized by being required to dress in a particular identifying garment. [Ref. 8:p. 26]

Thus, with the exception of the biblical references to debtor forgiveness, early bankruptcy law was a procedure impartially imposed upon debtors by creditors. Its primary objective was to confiscate and distribute the assets of a

[1] Throughout this thesis the masculine pronouns are used to indicate persons of either sex. This was done for simplicity.

delinquent debtor. It was not until 1705 that English law provided for the remission of bankruptcy debts. Debtors who surrendered all currently owned assets to creditors would then be given assurance by creditors that they would forswear future collection efforts. This law was drafted not with the debtor's future interest in mind, but rather it was designed to provide incentives to prevent debtors from concealing assets from creditors. [Ref. 8:p. 26]

Current bankruptcy law in the United States has its roots in the Constitution. Article 1, section 8, clause 4 of the 1789 Constitution decrees that the federal government is empowered to act in bankruptcy cases [Ref. 8:p. 127]. But, for the most part, Congress chose to delegate its legislative authority concerning bankruptcy to the individual states. The result is a hodge-podge of individual state bankruptcy laws. For a long time, the non-payment of debt was a penal offense, and states used the protection of debtors from their creditors as a means of enticing labor to their territories. However, these early bankruptcy laws only served the interests of creditors; and the procedures consisted solely of liquidating a debtor's assets to satisfy creditors' claims.

The federal government did attempt to intervene and pass a federal bankruptcy statute three times in the 19th century. In 1800, the United States first federal bankruptcy law was passed, only to be repealed three years later. Borrowing from English law, the statute only applied to those people in business. It made no provisions for voluntary bankruptcy, exemption of assets, or discharge of debts. [Ref. 8:p. 26]

In response to financial panics, equally short-lived bankruptcy laws were passed in 1842 and 1867. But, as with the 1800 bankruptcy law, these statutes were quickly repealed once the country regained a solid financial footing.

B. BANKRUPTCY LAW 1898 - 1934

The first major evolution in bankruptcy law occurred in 1898. In response to another financial crisis, Congress adopted the Bankruptcy Act of 1898, which survived, with amendments, until 1978. The law represented a significant liberalization of the bankruptcy process. In addition to commercial debtors, consumer debtors were finally provided bankruptcy protection from creditors. It expanded bankruptcy from a process that was imposed upon debtors by creditors to one that could be voluntarily sought be debtors. In addition, the new law had provisions for the discharge of debts not satisfied by the liquidation of the debtor's asset and allowed each state to establish categories of assets that would be exempt from being liquidated. [Ref. 8:p. 26]

C. BANKRUPTCY LAW 1934 - 1978

It had taken almost 2000 years for bankruptcy law to evolve from one based solely on creditor protection to one that took on a significant aspect of debtor protection. The changes invoked by the 1898 Bankruptcy Act did not come easy. Numerous debates were held in an attempt to ascertain what the goal of bankruptcy law should be. The debates focussed on the old issue of creditor versus debtor protection. In 1934, the Supreme Court formulated the following aim of bankruptcy law in the famous *Local Loan v. Hunt* case (292 U.S. 234, 244 (1934):

> One of the primary purposes of the Bankruptcy Act of 1898 is to relieve the honest debtor from the weight of oppressive debt, and to permit him to start afresh free from the obligations and responsibilities consequent upon business misfortune.
>
> The Act gives to the honest but unfortunate debtor who surrenders for distribution the property which he owes at the time of bankruptcy, a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt. [Ref. 9:p. 127]

With the Supreme Court having defined the goal of personal bankruptcy law, creditors acknowledged that debtors were going to receive a fresh start under the Bankruptcy Act of 1898, and shifted their focus to lobbying for legislation that would still require debtors to repay some of their debt while, at the same time, not interfere with the debtor's fresh start. This resulted in several amendments to the Bankruptcy Act of 1898, with the most important one being the 1938 Chandler Act.

The Chandler Act established a procedure allowing debtors to retain their assets while repaying all or part of their obligations with future earnings over a three year period, while receiving court protection from their creditors. This new process was available to employed individuals with steady income, and the repayment schedules were known as "wage earner plans." [Ref. 8:p. 26] The Chandler Act and its wage earner plan developed into what is known as Chapter 13 bankruptcy in present day bankruptcy statutes.

The idea of debtors repaying all or part of their debt with future earnings has a lot of merit if one considers the economic assumptions which enter into a lender's decision to extend credit. Companies who extend credit to individuals do so on the premise that they will be paid back out of future earnings and not the liquidation of assets. This is the main reason for employment verification checks being part of most loan transactions. While some creditors require collateral as insurance against default, the collateral merely acts as a safety net for the lender. The decision to extend credit to an individual is still primarily based on the ability to repay the debt out of future earnings. Thus, debtors who choose to repay their debts in Chapter 13 bankruptcy as opposed to walking away from them in Chapter 7 bankruptcy are acting more in accordance with their creditors' original expectations.

D. BANKRUPTCY LAW 1978 - PRESENT

The next evolution in bankruptcy law occurred in 1978. Following extensive congressional hearings on the existing bankruptcy process, bankruptcy law underwent its most extensive rewriting in history. The revised statutes were drafted in the House Judicial Subcommittee on Civil Rights and became known as the Bankruptcy Reform Act of 1978. The new law's most sweeping changes dealt with personal bankruptcy.

The Bankruptcy Reform Act of 1978 greatly increased the protection provided to consumers declaring bankruptcy. It erected greater protection against repossession of collateral for loans and made it more difficult for creditors to elicit an individual's reaffirmation of a debt. In addition, the new law introduced for the first time federal bankruptcy code exemptions for a debtor's assets. As mentioned earlier, prior to the Bankruptcy Reform Act of 1978, property exemptions were established by individual state law. The purpose of the new federal exemptions were to ensure that each debtor could retain enough property to afford himself a fresh start and resume a normal role in society. The new federal exemptions were considerably more generous than most existing state exemptions and also permitted each individual in a joint bankruptcy filing to claim such exemptions. This, in effect, doubled the exemptions available to joint filers. [Ref. 8:p. 27]

However, the new benevolent federal exemptions were not well received by the state legislatures. They viewed the 1978 Bankruptcy Reform Act as a federalist ploy to impinge upon their state jurisdiction. The individual states had legislated bankruptcy exemption policy since 1898, and many did not want to give up that privilege. What resulted was a political compromise between those who saw uniform exemptions as a necessary part of bankruptcy reform and those who wished to leave exemption decisions with the states [Ref. 10:p. 310].

This compromise of the Bankruptcy Reform Act of 1978 is called the "opt-out provision." The provision allows states to forbid by legislation their debtors from using the new federal bankruptcy exemptions and to substitute for the federal provisions a set of state generated exemptions [Ref. 10:p. 310]. In all, 37 states have exercised this right and adopted exemptions which were in aggregate less generous than the federal exemptions, but frequently more generous than the pre-existing state exemptions.

Another major reform of the Bankruptcy Reform Act of 1978 dealt with provisions designed to make a Chapter 13 bankruptcy easier for the consumer. It removed a provision that creditors must approve repayment schedules and gave the court sole discretion in a repayment plan's confirmation. The law states that a Chapter 13 repayment plan was to be confirmed if it paid creditors more than they would have received in a Chapter 7 liquidation bankruptcy, was proposed in "good faith", and the debtor had the ability to make the payments proposed [Ref. 8:p. 27].

The new law took effect on October 1, 1979. Creditors complained that the law was too liberal and allowed individuals who could repay a significant portion of their debts to evade repayment. In addition, it was postulated that many debtors who had filed Chapter 7 bankruptcy should have been required to file under Chapter 13. In short, lenders felt that the Bankruptcy Reform Act of 1978 had made bankruptcy too easy. The law provided attractive options and incentives to choose bankruptcy over debt repayment. The benefits derived from filing bankruptcy far outweighed the costs associated with it. And as a result, any rational consumer faced with this choice would choose to file bankruptcy. Thus, one would expect that bankruptcy filings should have increased as a result of the 1978 Act. Figure 2 provides the number of persons petitioning for nonbusiness bankruptcy for the two years leading up to and the three years following the enactment of the Bankruptcy Reform Act of 1978.

Figure 2 clearly shows a large jump in nonbusiness bankruptcy filings following the enactment of the Bankruptcy Reform Act of 1978. However, the question must be asked if this rise is solely attributable to the new law, or if it is possible that other factors have contributed to the increase.

A number of studies (Richard Peterson and Kiyomi Aoki, and Andrew F. Brimmer) have been done in an attempt to define the effect of the 1978 Act on the number of bankruptcy filings [Ref. 11 and 12]. The findings range from an estimate of one-third to three-fourths of the additional filings that may have been attributed to the new law. Other factors contributing to the dramatic increase in bankruptcy filings include the following:

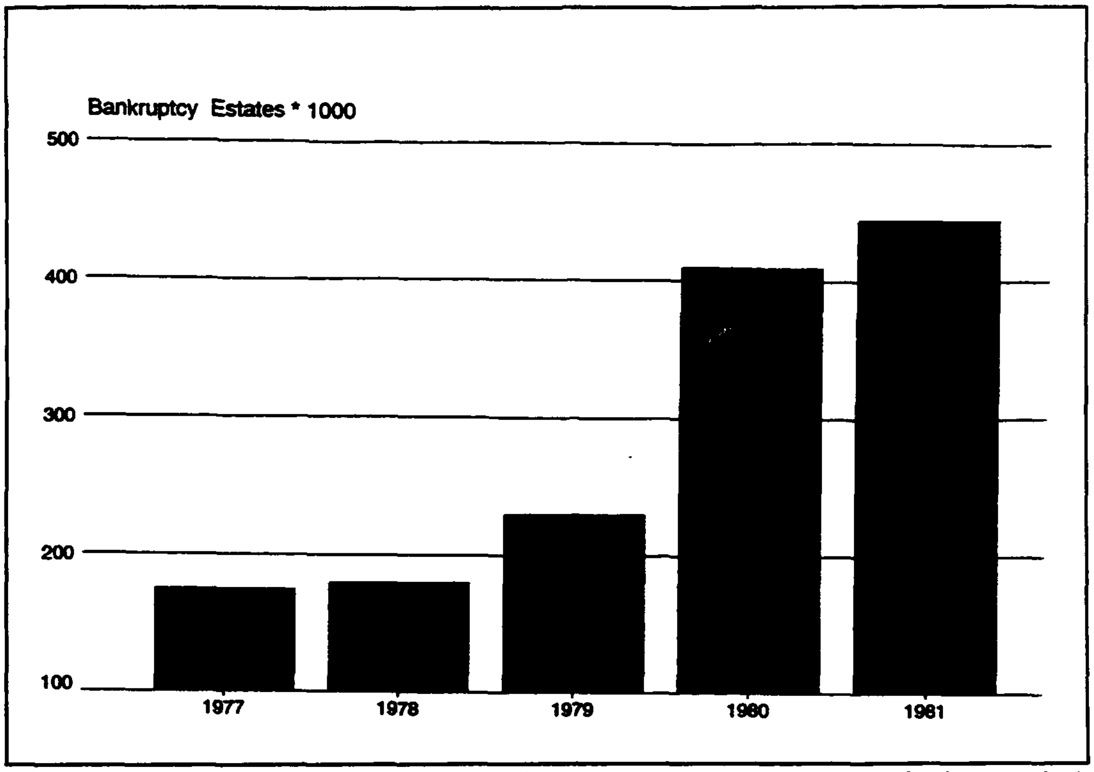

Figure 2 Number of Nonbusiness Bankruptcy Petitions (12 Month Periods Ending June 30)

Source: Administrative Office of the U.S. Courts, Bankruptcy Division

- The increasing use of bankruptcy in business and among consumers has significantly reduced the stigma that had previously discouraged consumers from bankruptcy.

- At approximately the same time as the Bankruptcy Reform Act of 1978, lawyers were permitted to advertise their services. This increased consumer awareness of bankruptcy as a potential solution to financial problems.

- The high inflation years of the late 1970's left many consumers with a substantial debt burden which later proved to be too much to manage in the back-to-back recessions of the early 1980's.

- The increased media coverage provided bankruptcy raised consumer awareness of its use as a potential solution to financial problems.

- The progressive depersonalization of the debtor-creditor relationship resulted in creditors extending more credit with fewer constraints and checks. In addition, debtors were more inclined to walk away from obligations for which they felt no personal responsibility.

The surge in bankruptcy filings opened up an intense debate on whether or not the Bankruptcy Reform Act of 1978 was too liberal in its provisions. Following much congressional review, a retooling of the 1978 Act occurred in 1984. The amendments added to the 1978 Act rescinded some of its liberal provisions which many believed had contributed to the dramatic rise in bankruptcy filings. However, bankruptcy law following the 1984 amendments was still considerably more generous to debtors than what had existed prior to the Bankruptcy Reform Act of 1978. Specifically, the bankruptcy reform legislation enacted in 1984 had the following major provisions:

- Allowed the courts to dismiss a bankruptcy case if it is found that the granting of relief would be a "substantial abuse" of the bankruptcy system. However, the new law failed to establish a specific standard for substantial abuse, and in practice the application of this provision has not been vigorously applied throughout the court system.

- Required joint bankruptcy filings to choose either federal or state exemptions unless the state has chosen to opt-out of the federal exemptions. In this case, debtors would have no alternative but to use the state exemptions.

- Limited the amount of "eve-of-bankruptcy" spending spree debt which could be discharged.

- Removed the requirement to obtain court approval for the reaffirmation of a debt if the debtor is represented by counsel and the agreement is filed with the court. [Ref. 8:p. 27]

The history of present day bankruptcy law has witnessed the evolution of bankruptcy from a process imposed by creditors on debtors to one that could be voluntarily sought by debtors. With the introduction of Chapter 13 bankruptcy, there was a shift in the focus from ability to pay based on assets, to ability to pay out of future income. In economic terms, this was a modest change, since credit markets operate on the assumption of debt repayment coming out of future earnings. There is precedence for this in the Federal Student Loan Program. Students who have no income and few assets can obtain loans based on their ability to repay their loan out of future income. Congress recognized this in the Bankruptcy Reform Act of 1978 by specifically making student loans nondischargeable, except for hardship cases, in bankruptcy. [Ref. 12:p. 191]

The bankruptcy debate continues today. Creditors want bankruptcy laws toughened. Simply stated, creditors feel that debtors unable to repay their debts should be granted relief. However, those able to repay their debt, either now or in the future, should be required to repay their obligations. Filing bankruptcy should be a last resort for consumers and not their first choice. Consumer rights groups advocate the inalienable rights of debtors to receive a fresh start free of any debt after bankruptcy. While this debate continues, the number of nonbusiness bankruptcy filings continues to climb. In 1992, their were over 900,000 nonbusiness bankruptcy filings-one filing for every 110 households in the United States [Ref. 1]. While it is difficult to predict how bankruptcy law will evolve in the future, one can postulate that the rising number of bankruptcy filings and their associated cost to the economy will result in another not-to-distant retooling of the bankruptcy code.

III. THE BANKRUPTCY PROCESS

Declaring bankruptcy is a constitutional right of protection against creditors. It permits individuals to make a "fresh start" free from the obligations and responsibilities incurred during previous financial difficulties. Filing for bankruptcy protection solves financial problems either by wiping out debt (Chapter 7) or by reorganizing debt so that it can be paid within the budget of the debtor (Chapter 13). [Ref. 13:p. 3] There are no requirements that a debtor be insolvent, unemployed, or have some certain debt-to-income ratio to file bankruptcy. The process is available to anyone who fills out the required forms and pays the $120 filing fee. Being broke and going bankrupt is the same only in Monopoly [Ref. 6:p. 21].

There are five basic types of bankruptcy. They are referred to by the number of the section of the Bankruptcy Code in which the rules for each are listed. The five are as follows:

- Chapter 7 (Straight Liquidation) - Debtors are permitted to retain certain exempt assets, but the remainder of their assets become part of the bankruptcy estate and are liquidated to satisfy creditor's claims. Debtors obtain a discharge from any remaining unsecured debt.
- Chapter 13 (Wage Earner) - Debtors retain all their assets, but submit a court supervised repayment of debt plan for a three to five year period. Secured creditors are paid 100 percent of the market value of the collateral

protecting the debt, and unsecured creditors split whatever remains after paying secured creditors and priority claims.

- Chapter 11 - This chapter is primarily used to reorganize large business corporations and by some individuals whose aggregate debts exceed those allowed in a Chapter 13 filing.

- Chapter 12 - This chapter is a specialized type of reorganization formulated for family farmers. It is very similar to Chapter 13 but has provisions to account for the special circumstances associated with the operation of a farm.

- Chapter 9 - This chapter is used exclusively to reorganize municipalities that file bankruptcy.

The remainder of this chapter focuses on Chapter 7 and 13 bankruptcies. These two chapters are what come to mind when one hears the term personal bankruptcy or nonbusiness bankruptcy. The discussion here will look in depth at the bankruptcy filing process and some of the specifics associated with the Bankruptcy Code for Chapter 7 and 13 bankruptcies. Someone who has a good working knowledge of the bankruptcy process may want to consider turning to the next chapter as there will be little new information for him.

A. CHAPTER 7: STRAIGHT LIQUIDATION BANKRUPTCY

The process of filing personal bankruptcy is not difficult as evidenced by the large volume of filings. At the San Diego, California bankruptcy court 14,799 petitions were filed in 1991. At the Jacksonville, Florida bankruptcy court 6,767 petitions were filed in 1991. [Ref. 14] When one considers that the San Diego court system has only four judges and the Jacksonville court system, one judge to litigate this large case load, it becomes apparent that the court system does not possess the resources to spend a lot of time with each case. In general, a person who files Chapter 7 bankruptcy and plays by the rules will receive a discharge from debt four to six months after filing. If debtors choose, they can file bankruptcy without the assistance of a lawyer. This is known as a *pro se* petition. However, for the purpose of explaining the bankruptcy filing process, it will be assumed a lawyer is utilized by the debtor. In the researcher's Jacksonville and San Diego sample groups, 84 and 95 percent of the active duty Navy bankruptcy cases sampled used lawyers or self help law offices to file bankruptcy.

1. Steps Involved in Filing Chapter 7 Bankruptcy

The steps involved in filing a typical Chapter 7 bankruptcy are as follows.

a. Fill Out the Required Forms

The bankruptcy process begins with the debtor filling out a number of schedules designed to provide the courts the required information to adjudicate the case. These forms include the following:

- Voluntary Petition (Form 1)
- The Debtor's Statement of Intention
- Real Property Schedule (Schedule A)

- Personal Property Schedule (Schedule B)
- Property Claimed as Exempt (Schedule C)
- Creditors Holding Secured Claims (Schedule D)
- Creditors Holding Priority Claims (Schedule E)
- Creditors Holding Unsecured Claims (Schedule F)
- Executory Contracts and Unexpired Leases (Schedule G)
- Codebtors (Schedule H)
- Current Income of Individual Debtors (Schedule I)
- Current Expenditures of Individual Debtors (Schedule J)
- Summary of Schedules
- Attorney's Fee Disclosure Statement

The U.S. court system does not supply these forms or mandate a specific format to be used to file bankruptcy. Rather, they are available from an attorney or can be purchased at a legal stationery store. This results in a wide variety of formats being used to file bankruptcy and, as can be expected, a good deal of data inconsistency from case to case. This data inconsistency created some difficulties for the researcher, as additional time was required to decipher the many different formats used to file bankruptcy. The researcher strongly feels that the U.S. Bankruptcy Court could achieve significant productivity gains if it were to provide a standard set of bankruptcy forms with which to file Chapter 7 or 13 bankruptcy and mandate and enforce exactly how the forms are to be completed.

The debtor is required to segregate his debt into three categories: priority, secured, and unsecured claims. The debts that compose the first category are called priority claims because they cannot be discharged in bankruptcy. This type of debt generally is not affected by bankruptcy. The most common example of priority claims listed in bankruptcy petitions are taxes. They can be property taxes, state taxes, federal income taxes, or any other types of taxes [Ref. 13:p. 59].

Secured debt refers to debt which has a specific asset, such as a house or car, pledged as collateral. In this type of debt, creditors extend credit based both on the ability to pay and the right to seize pledged property on default. Secured debt is not dischargeable under Chapter 7 bankruptcy. However, debtors can choose to surrender proper pledged on a debt and any balance due the creditor will be discharged. For example, if a debtor has an outstanding balance on a second car loan of $6,000 and the car has a market value of $4,000, he could surrender the car to the creditor and the $2,000 difference would be considered as unsecured debt and dischargeable.

Unsecured debt is that debt for which the extension of credit was based purely upon an evaluation by the lender of the debtors ability to repay. There is no collateral involved in unsecured debt. Typical examples of unsecured debt include credit card debt, department store debt, medical debt, and some types of signature loans. Unsecured debt not obtained through fraudulent representation or manipulation of the bankruptcy process is 100 percent dischargeable. It is important to note that only those debts listed on the bankruptcy petition are eligible to be discharged. If a debtor fails to list a debt or provide the correct mailing address for a creditor, that specific debt will not be discharged.

In filling out the Property Exemption Schedule, debtors must choose what personal property they desire to retain. The court refers to this property as exempt property. Federal bankruptcy law provides that a debtor, or both debtors in a joint filing, can protect some property from the claims of creditors because it is either exempt under federal law or exempt under the laws of the debtor's home state. Many states have taken advantage of a provision in the law which permits each state to adopt its own exemption law in place of the federal exemption law. In other jurisdictions the debtor has the option of choosing either the federal or state exemptions. [Ref. 15:pp. 3-4]

Currently there are 37 states which require debtors to use only the state exemptions, these include Alabama, Alaska, Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New York, North

Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, and Wyoming. The two states, California and Florida, in which bankruptcy cases were sampled for this research permits debtors to use only their state exemptions.

It is important to note that over 95 percent of nonbusiness bankruptcy filings are classified as "no asset" cases. These are cases where all of the debtor's listed assets are exempt or subject to valid liens. This can occur if a debtor possesses very few assets, so that all can be claimed as exempt. It also can occur if the court decides that the effort required to liquidate assets in excess of allowed exemptions would be greater than the benefit derived from selling them. In this case, debtors would be permitted to retain assets in excess of exemption limits. Combining the Jacksonville and San Diego sample groups, 93 percent of the Chapter 7 bankruptcy cases were no asset cases, and in only four cases did the court challenge claimed exemptions. In simpler terms, virtually none of the debtors sampled were required to surrender any property (with the exception of secured debt for which the debtor choose to return the collateral) as a result of their bankruptcies.

The last document completed when filing bankruptcy is the Statement of Financial Affairs. It asks a number of questions which are intended to allow the court to discover any inappropriate transactions and to find additional assets not disclosed on the Personal Property Schedule. These questions require the debtor to account for the handling of his finances leading up to bankruptcy. Debtors sign this form and assert under penalty of perjury, that the information contained therein is true and correct to the best of their knowledge. Debtors who make false statements in an attempt to conceal assets or pre-bankruptcy transactions run the risk of being convicted of a felony. Bankruptcy fraud is a felony and can be tried in federal court. If convicted, the debtor is subject to imprisonment for up to five years and a $5,000 fine for each count of fraud, up to a maximum fine of $500,000 [Ref. 2:p. 29].

b. Filing the Petition With the Court

Bankruptcy petitions are filed at the bankruptcy court having jurisdiction over the county listed in the petition. The courts are required to charge a $120 filing fee, which is paid to the Clerk of the Court at filing. However, with court's permission, the filing fee may be paid in up to four installments which can extend over 180 days from the petition filing date. Failure to pay the $120 filing fee in full is grounds for dismissal of the case.

Once the debtor has filed his bankruptcy petition with the court, the debtor's world changes. The legal consequences of his actions are swift and dramatic. The moment a debtor files his petition with the court a whistle blows to stop all collection efforts. There are no more harassing phone calls, letters, or bills. All repossession and foreclosure action previously initiated against the debtor cease. No legal judgments can be brought against the debtor and his wages cannot be garnished. The legal term for this cessation of all collection efforts against the debtor is an "automatic stay." [Ref. 6:p. 24] The automatic stay occurs by operation of law and requires no formal judicial action. The law states that creditors cannot do any act to collect, assess, or recover a claim against the debtor that arose before the commencement of the case. [Ref. 13:p. 38]

For many debtors, the automatic stay serves to lessen any negative psychological impact resulting from filing bankruptcy. The post-filing period brings the debtor a period of relative calm, as he is no longer being harassed by overzealous creditors. Usually, the finale motivation for filing bankruptcy arises out of a creditor's particular aggressive collection effort. The debtor may be faced with the loss of his home or perhaps the loss of his job as a result of creditor harassment. The automatic stay puts a stop to this harassment and gives the debtor time to relax and restore some sense of normalcy to his life.

The courts initiate the automatic stay process by sending notices to all creditors listed in the petition that the debtor has filed bankruptcy. Upon notification of the debtor's bankruptcy filing, creditor are required to cease all collection efforts. It is important to not that only those creditors listed in the petition with the correct mailing address are affected by the automatic stay. Any creditor inadvertently or deliberately not listed in the petition are not required to abide by the automatic stay.

However, the protection provided to debtors by the automatic stay is not absolute. The automatic stay will not stop any criminal action against the debtor. This exception is most commonly invoked when a debtor has written an insufficient-funds check, since this is a criminal offense. [Ref. 13:p. 38] In addition, although the automatic stay theoretically can stop alimony and child support payments, most bankruptcy judges will grant the recipient of these payments relief from the automatic stay and allow collection on these debts.

Creditors with liens on the debtor's property have the right to ask the court for relief from the automatic stay. This generally can occur when a creditor feels that his lien is not adequately protected due to a combination of the debtor no longer making payments and the depreciating market value of the collateral. This is common in car loans, where the creditor can prove that the debtor is not maintaining sufficient auto insurance to protect the creditor's collateral. Although no data was systematically collected on the number or causes of reliefs from the automatic stay, the researcher feels that the large majority of all reliefs granted from the automatic stay in the active duty Navy bankruptcy cases sampled were a result of car loan transactions.

Another powerful effect as a result of filing a bankruptcy petition is that, from a legal aspect, the debtors no longer own any property. The debtors' property now belongs to the bankruptcy estate and the debtors are no longer entitled to do as they please with their property. They must obtain the permission of the court to dispose of any property or close a financial account. [Ref. 6:p. 24]

The purpose of the automatic stay and the formation of the bankruptcy estate is to give the courts a chance to assess the situation and develop a coherent plan of action. It is essential that the court prevents assets from mysteriously disappearing, either from creditor taking them away or debtors handing them out. This ensures an equitable distribution to all creditors. From this point on, until the case is closed, the debtor's assets and financial transactions are under the court's jurisdiction.

c. The Role of the Trustee

An impartial trustee is assigned to each bankruptcy case. The trustee is usually a lawyer who specializes in bankruptcy law and who has volunteered for a panel of trustees [Ref. 6:p. 26]. The panel is overseen by a federal official called the U.S. Trustee, who works with the bankruptcy court.

It is the trustee's job to sort through the information provided in a bankruptcy case to separate fact from fiction and truth from fraud. Trustees are responsible for the administration of the bankruptcy case. When there are non-exempt assets to be sold, the trustee sells them and distributes the proceeds to the creditors. Trustees are vested with a large amount of power in order to give them the ability to produce the maximum return possible for the debtor's creditors.

d. The Meeting of Creditors

Between 30 to 50 days after the debtor files bankruptcy, the debtor will be required to appear at the first meeting of creditors. This meeting is referred to as a "Section 341A meeting" because that is the section of the bankruptcy code which authorizes it. The following people usually attend this meeting: the debtor, the debtor's attorney, the trustee, the bankruptcy clerk, and any creditors who desire to attend. When creditors receive notification of the Section 341A meeting, they also are informed as to whether or not it is anticipated there will be assets available to liquidate for the repayment of creditors. Typically, most Chapter 7 bankruptcy cases involving individual debtors are no-asset cases; and, as a result, it is rare for unsecured creditors to appear at a Section 341A meeting.

The Section 341A meeting is conducted by the trustee. The debtor is sworn in and submitted to a number of questions dealing with his financial situation. The trustee's questions have two motives. One purpose is to discover whether the debtor has any non-exempt assets that can be liquidated to repay debt. The second purpose is to determine how honest the debtor has been in disclosing his financial situation. [Ref. 13:p. 50] In addition to the trustee's questions, creditors frequently interrogate the debtor to find out if the debtor plans on reaffirming any debt and whether or not the debtors obtained credit by providing false information on a credit application. If the later can be proved, the creditor can file an objection to discharge for that particular debt. If the creditor wins the objection that debt will not be discharged in bankruptcy and the debtor will be liable for the amount of the claim.

Upon completion of most 341A meetings, the trustee is satisfied that the debtor has truthfully disclosed his financial situation and is not hiding any assets. At this point of the bankruptcy process, the majority of Chapter 7 debtors will now only have to wait for the court system to finish processing their cases to receive their discharge of debt and fresh start.

e. *The Sixty Day Wait*

Following the 341A meeting there is a mandatory 60 day waiting period before a debtor is discharged from his debt. The purpose of this waiting period is twofold. First, it gives creditors time to accumulate data in support of any objections to discharge of a debt which they may file. Once this 60 day waiting period passes, the creditor loses the chance to file objections. Second, it gives the debtor time to ensure that all his creditors have been notified of the bankruptcy proceedings. It is the debtor's responsibility to ensure that he has provided the court with the correct mailing addresses for his creditors. Following this 60 day waiting period, the debtor receives his discharge from debt.

f. *The Discharge Hearing*

The Administrative Office of the U.S. Courts states that, as a general rule, individual debtors are discharged in more than 99 percent of Chapter 7 cases. The grounds for denying a debtor a discharge are narrow and skewed in favor of the debtor. They include the debtors failure to provide adequate financial records; the debtor's inability to explain the loss of assets; the debtor committing perjury during the bankruptcy process; the debtor disobeying a lawful order of the court; or the debtor fraudulently transferring or concealing property that would have become part of the bankruptcy estate. [Ref. 13:p. 6] Having established that almost all debtors will receive a discharge of debt, one can gain a better understanding of the simplicity of the discharge hearing.

It used to be required for all debtors to appear before the bankruptcy judge to receive their discharge of debt. At the discharge hearing debtors were usually given a lecture by the judge and then declared discharged from their debts. However, with today's large case load threatening to overwhelm the court system, the majority of debtors are not required to make a court appearance in order to be discharged from debt. Rather, they are discharged from their debt via a letter received in the mail. The Jacksonville and San Diego courts did not require their debtors to appear in court for their discharge from debt.

However, if a debtor chooses to keep possession of an asset listed as collateral for a secured debt, he may be required to appear before the bankruptcy judge. In this case, a reaffirmation of the debt may be the only way a creditor will allow the debtor to retain the property. A reaffirmation is an agreement between the debtor and the creditor that the debtor will pay all or a portion of the money owed, even though the debtor has filed bankruptcy. In return, the creditor promises that as long as payments are made the creditor will not repossess the property. Reaffirmation agreements must be filed with the court and, if the debtor is not represented by an attorney, must be approved by the judge prior to the debtor's discharge. [Ref. 15:p. 6]

Upon receipt of the certificate of discharge debtors are free of the debts listed in their petitions. At this stage, the debtor's long awaited fresh start begins. However, filing bankruptcy has resulted in a number of restrictions being placed on the debtor's life. Debtors are prohibited from filing another Chapter 7 petition for six years, and their bankruptcy is a public record which can remain on their credit record for up to ten years. [Ref. 6:p. 32] Finally, some debtors are surprised to learn that some of their debts are nondischargeable for reasons not related to debtor misconduct.

2. Nondischargeable Debts

Certain types of debts are prohibited by law from being discharged in a Chapter 7 bankruptcy. These debts survive the bankruptcy process and must be paid in full by the debtor. The following are examples of debt which are nondischargeable in Chapter 7 bankruptcy:

- Debts not listed in the petition.
- Debts incurred through fraud.
- Alimony and child support payments.
- Debts incurred as a result of willfully or maliciously injuring someone.
- Noncompensating (punitive) fines.

- Certain types of educational loans.
- Debts remaining from prior bankruptcy.
- Most types of taxes.
- Debts owed to an individual creditor that were incurred within 40 days of filing bankruptcy and total more than $500 in luxury goods and services.
- Cash advances that were obtained within 20 days of filing bankruptcy and total more than $1,000 under an open-ended credit plan.
- Debts incurred from damages caused as a result of operating a motor vehicle while legally intoxicated or under the influence of drugs. [Ref. 13:p.17]

3. The Positive and Negative Aspects of Chapter 7 Bankruptcy

A Chapter 7 bankruptcy is a relatively quick option for debtors with few assets and a lot of debt. It may pay something to creditors, though in the majority of cases will not. It will provide the debtor a fresh start in four to six months. Table I compares some of the positive and negative aspects of Chapter 7 bankruptcy.

B. CHAPTER 13: WAGE EARNER PLAN BANKRUPTCY

Chapter 13 bankruptcy is designed for debtors with a regular income who desire to pay their debts but are currently unable to do so. It allows debtors, under court supervision and protection, to repay their debts over a three to five year period. [Ref. 16:p. 1] Chapter 13 bankruptcy allows a debtor to retain all their property, including property subject to

Table I POSITIVE AND NEGATIVE ASPECTS OF CHAPTER 7 BANKRUPTCY

Positive

- An automatic stay is invoked when the petition is filed with the court. Creditors cannot call or write; they cannot repossess or foreclose property. It stops all lawsuits filed against the debtor. The automatic stay acts to immediately relieve the financial pressure on the debtor and his family.
- With some exceptions, most debts are discharged.
- The process is completed relatively quickly.

Negative

- A Chapter 7 bankruptcy can be reported for up to ten years on a debtor's credit record.
- Rights of secured creditors cannot be modified. The debtor's only options to keep an asset listed as collateral for a debt are to (1) make contractual payments promptly; (2) reaffirm the debt under terms that the debtor can meet; or (3) redeem the property by paying its value in a lump sum.
- Not all debt is dischargeable, and the debtor could loose some personal property if it designated non-exempt.

liens, in exchange for their promise to pay all or some part of the debt with future income. It affords the debtor an opportunity to significantly reduce the amount owed on both secured and unsecured debt while providing him the moral satisfaction of repaying at least some of his debt.

Generally, only individuals can seek protection under a Chapter 13 bankruptcy, although small businesses can use it if they are owned by a sole proprietor. It is only available to those individuals whose total unsecured debt is less than

$100,000 and total secured debt less than $350,000. [Ref. 13:p. 12]

It is important to note that Chapter 13 bankruptcy protection is only available to those debtors who possess sufficient income to satisfy the debt repayment requirements stipulated in the bankruptcy code. As a result, the number of Chapter 13 bankruptcies filed are significantly less than the number of Chapter 7 bankruptcies filed. In 1991, approximately 30 percent of all nonbusiness bankruptcy filings were Chapter 13 cases with the remaining 70 percent being Chapter 7 bankruptcies. [Ref. 17:p. 18]

In addition, the proportion of nonbusiness bankruptcies filed under Chapter 13 varies substantially across states. As an example, in 1991, 63 percent of nonbusiness bankruptcies filed in North Carolina were Chapter 13 cases, while only four percent of those filed in Vermont were Chapter 13 cases. At the researcher's sample points, the split for the total nonbusiness filings in 1991 was as shown in Table II.

1. Steps Involved In Filing Chapter 13 Bankruptcy

The steps involved in filing a Chapter 13 bankruptcy are very similar to those involved in filing a Chapter 7 bankruptcy. Since the Chapter 7 bankruptcy process has already been discussed in detail, only the differences between a Chapter 7 and Chapter 13 bankruptcy will be presented in this section.

Table II PERCENTAGE SPLITS OF NONBUSINESS BANKRUPTCY FILINGS IN JACKSONVILLE AND SAN DIEGO

Sample Point	% Chapter 7	% Chapter 13
Jacksonville	90.0	9.7
San Diego	63.7	35.7

Source: Administrative Office of the U.S. Courts, Bankruptcy Division, Table F-5A, 1991

a. Fill Out the Required Forms

When a debtor files a Chapter 13 bankruptcy he fills out the basic property, income, and debt schedules as he would if he was filing a Chapter 7 bankruptcy. The major difference between the two types of bankruptcy is that for Chapter 13 the debtor must also submit a detailed schedule of his projected expenses and income.

The schedules of the debtor's projected expenses and income are used to formulate the debtor's repayment plan. The repayment plan must either be filed with the petition or within 15 days thereafter.

b. The Repayment Plan

The bankruptcy code provides a number of attractive incentives originally designed to entice debtors to file Chapter 13 bankruptcy vice Chapter 7. It allows debtors to restructure their debt to obtain a lower monthly payment which can be supported by the debtor's budget. Generally, the difference between the debtor's listed income and expenses is the monthly repayment which is proposed in his repayment plan. The repayment period is limited to three years unless the debtor specifically requests a longer period. In no case may the plan's repayment period be greater than five years.

Chapter 13 bankruptcy treats debt differently than Chapter 7 bankruptcy. Priority claims, such as taxes and spouse or child support, still must be paid in full. However, secured debt is treated very differently, with the one exception of home mortgages.

Mortgage lenders have special protection in Chapter 13 bankruptcy. The debtor's future monthly payments can not be rescheduled without the lender's approval. A mortgage lender is entitled to full payment under the terms of the original mortgage agreement or the lender can foreclose on the property. [Ref. 6:p. 34] However, the bankruptcy code does permit a debtor to make up payments in arrears over the life of the repayment plan. For example, if a debtor was three months behind in his mortgage payments and the mortgage company was about to foreclose on the property, filing Chapter 13 bankruptcy would stop the foreclosure. As long as the debtor made all future payments on schedule and agreed to repay the payments in arrears over the life of the repayment plan, the mortgage company cannot foreclose on the debtor's property.

The bankruptcy code is even more generous when dealing with the other types of secured debt such as car and furniture loans. For this type of secured debt, the debtor is permitted to repay only the market value of the collateral plus interest, and the payments can be extended over the life of the repayment plan. For example, if a debtor owes $10,000 on an automobile loan, but the market value of the automobile is only $7,000, then the debtor need only repay $7,000 plus interest to satisfy the debt. The $3,000 difference is treated as unsecured debt.

Unsecured creditors get paid the least in Chapter 13 bankruptcy, but generally more than they would have received if the debtor had filed Chapter 7 bankruptcy. Unsecured creditors receive no interest on their debt and are paid on a pro rata basis according to the size of each claim and how much money the debtor has left to apply toward these claims after his priority claims and secured debt are paid. The bankruptcy code does not stipulate that the debtor must pay some minimum amount to unsecured creditors. Unsecured creditors might get 20 cents on the dollar or be paid in full. [Ref. 6:p. 35]

However, the bankruptcy code does provide some protection for unsecured creditors. It states that the debtor's repayment plan must pay unsecured creditors as much as they would have received if the debtor had filed a Chapter 7 bankruptcy and his non-exempt assets were liquidated and the proceeds distributed to creditors. Given that approximately 95 percent of all nonbusiness Chapter 7 bankruptcy cases have no assets in excess of the allowed exemptions, many Chapter 13 debtors pay as little as one percent of their unsecured debt. For example, consider a Chapter 13 debtor who had $3,000 of non-exempt property he wanted to retain. If the debtor proposed a three year repayment plan, each month he would have to pay at least $36 to his unsecured creditors. This is the minimum payment allowed by law.

c. The Role of the Trustee

Just as in a Chapter 7 bankruptcy case, an impartial trustee is assigned to each Chapter 13 bankruptcy case. However, the primary duty performed by a Chapter 13 trustee is much different from that performed by a Chapter 7 trustee. The Chapter 13 trustee's main duty is to administer the debtor's repayment plan. The Chapter 13 trustee receives payments from the debtor and then distributes the funds to creditors according to the terms of the plan. He is responsible for initially reviewing the debtor's proposed budget to verify that it is reasonable and achievable for the debtor. Based upon this review and meetings with the debtor, the trustee will then recommend to the bankruptcy judge whether or not to confirm the repayment plan.

Chapter 13 trustees have an incentive to pursue as large a payment as possible from debtors. The trustee for a Chapter 13 bankruptcy is paid a certain percentage of the payments that he disburses to creditors. The bankruptcy code states that a trustee may retain up to ten percent of what the trustee collects to cover his administrative costs and salaries. The actual percentage varies according to the total amount of money paid into all Chapter 13 repayment plans in a particular bankruptcy district.

Many Chapter 13 trustees are now specialists, so called "standing trustees." They have computerized offices and staffs which in a large bankruptcy court such as San Diego will handle millions of dollars in debtor payments in a year.

d. The Meeting of Creditors

Between 30 to 50 days after the debtor files Chapter 13 bankruptcy, the debtor will be required to appear at a Section 341A meeting. This meeting is also held in a Chapter 7 bankruptcy case, but in a Chapter 13 bankruptcy it will focus on some additional things not emphasized in a Chapter 7 bankruptcy meeting. The 341A meeting will be chaired by the trustee assigned to the case. Both the trustee and creditors will ask the debtor questions about his financial situation and the debtor's proposed repayment plan. The goal of the trustee at this meeting is to resolve as many debtor/creditor disagreements as possible and to arrive at a recommendation for the judge as to whether or not to confirm the plan.

Immediately prior to the 341A meeting a very important step occurs. The bankruptcy code states that, within 30 days of filing a repayment plan, the debtor must start making payments to the assigned trustee. [Ref. 16:p. 4] This occurs even though the repayment plan ordinarily has not yet been confirmed by the judge. The timeliness of this initial payment can have a significant impact on the trustee's recommendation to the judge.

e. The Confirmation Hearing

Once the trustee has established a firm count of the creditor's filed claims, the confirmation hearing is held. This hearing is in front of the bankruptcy judge with the debtor, trustee, bankruptcy clerk, attorneys, and any creditors who desire to be in attendance present. The bankruptcy judge holds the hearing to determine whether the repayment plan has a reasonable chance of success and if it meets all the legal requirements of the bankruptcy code. [Ref. 6:p. 37] The federal requirements to confirm a Chapter 13 repayment plan are as follows (they have been paraphrased to make them more understandable):

- The repayment plan proposed complies with all the administrative and bookkeeping rules and provisions governing Chapter 13 bankruptcy.
- The debtor has either paid, or arranged to pay in installments, the $120 filing fee.
- The repayment plan is proposed in "good faith." Of all the requirements, this is the vaguest. The federal court system has not uniformly defined good faith. The issue generally arises when debtors propose a plan that pays unsecured creditors nothing or a very low percentage of the debt. Some courts will not confirm repayment plans

like this, while others will. No one knows what the final answer will be on this issue.

- Unsecured creditors are paid at least as much as they would have received in a Chapter 7 bankruptcy.
- Secured creditors receive their collateral or are paid the market value of the collateral plus interest over the terms of the repayment plan.
- The debtor has the ability to make the payments proposed in the repayment plan. [Ref. 13:pp. 74-78]

The judge considers the proposed repayment plan in light of the above requirements and the trustee's recommendation. If no creditors object to the debtor's repayment plan and the plan meets the above requirements the judge will confirm the repayment plan.

f. The Discharge Hearing

Assuming that the debtor has faithfully made his payments to the trustee over the life of the debtor's repayment plan he will go back to court upon completion of his plan and obtain a discharge from any unpaid portion of his debt. This discharge generally will cover the portion of unsecured debt not repaid by the repayment plan. [Ref. 6:p. 38] This last act by the court ends the debtor's responsibility under the plan and starts the debtor on a fresh beginning.

Debtors who have paid their unsecured creditors at least 70 percent of their claims, and whose repayment plan was proposed in good faith, retain the right to file a Chapter 7 bankruptcy case within the next six years. Debtors who fail to meet this hurdle are prevented from filing a Chapter 7 bankruptcy case for six years. There are no prohibitions against a debtor who successfully completes any type of a Chapter 13 bankruptcy from filing another Chapter 13 bankruptcy case. [Ref. 13:p. 85]

g. Plan Modifications and Conversions

The courts recognize that a debtor may experience problems in his life which make it impossible to meet the agreed upon repayment. A spouse may lose a job or there may be unexpected medical bills. The court permits a debtor to request a modification to his repayment plan so that he can continue making some payment and not have his case dismissed. One common approach to lower payments is to extend the payment period up to a maximum of 60 months. In addition, payments can be reduced by lowering what the debtor originally agreed to repay his unsecured creditors. This is allowed as long as the unsecured creditors will still receive as much as they would have in a Chapter 7 bankruptcy. [Ref. 13:p. 82]

Another alternative to unexpected financial hardship during a Chapter 13 bankruptcy is to convert the case to a Chapter 7 bankruptcy. In this case, the creditors will reduce their debts by what was paid in Chapter 13 bankruptcy and the Chapter 7 bankruptcy process will govern the case from then on. No permanent benefits carry over from the Chapter 13 bankruptcy case. [Ref. 6:p. 39]

2. Nondischargeable Debts

Certain types of debts are prohibited by law from being discharged in a Chapter 13 bankruptcy. However, a discharge under a Chapter 13 bankruptcy is more comprehensive than a discharge under a Chapter 7 bankruptcy. The following are examples of debt which are nondischargeable in Chapter 13 bankruptcy:

- Alimony and child support payments.
- Certain types of educational loans.
- Debts incurred from damages caused as a result of operating a motor vehicle while legally intoxicated or under the influence of drugs.
- Noncompensatory (punitive) fines.
- Debts incurred as a result of willfully or maliciously injuring someone.
- Most types of taxes. [Ref. 13:p. 85]

It is important to note that fraudulently incurred debts and any of the other special classifications of debtor misbehavior are dischargeable in a Chapter 13 bankruptcy. [Ref. 13:p. 38] However, this is subject to change when bankruptcy law is next reviewed by Congress.

3. The Positive and Negative Aspects of Chapter 13 Bankruptcy

Chapter 13 bankruptcy is designed for individuals with a regular income who desire to repay their debt, but are currently unable to do so. Debtors in Chapter 13 bankruptcy retain all their assets, but commit all their future income in excess of approved expenditures to a court administered three to five year debt repayment plan. If the repayment plan is successfully completed, the debtor will receive his fresh start after the plan's last payment. Table III compares some of the positive and negative aspects of Chapter 13 bankruptcy.

Table III POSITIVE AND NEGATIVE ASPECTS OF CHAPTER 13 BANKRUPTCY

Positive

- Existing debt payments can be reduced as the law permits the modification of the rights of most secured creditors.

- An automatic stay is invoked when the petition is filed with the court. Creditors cannot call or write; they cannot repossess or foreclose property. It stops all lawsuits filed against the debtor. The automatic stay acts to immediately relieve the financial pressure on the debtor.

- It allows the debtor to retain all his property.

- A discharge under Chapter 13 bankruptcy has the potential to eliminate more debts than a discharge under a Chapter 7 bankruptcy.

- Unsecured debts can also be discharged in a Chapter 13 bankruptcy, although the courts expect the debtor to allocate all of his disposable income to the repayment plan.

Negative

- It damages the debtor's credit rating. A Chapter 13 bankruptcy can be reported for seven years on the debtors credit record.

- The repayment plan involves long periods of interaction with the court system. The three to five year repayment plan provides plenty of opportunities for the debtor to fall behind in his payments and his Chapter 13 bankruptcy case being subsequently dismissed.

IV. METHODOLOGY

A. INTRODUCTION

The methodology followed for the research drew from two previous bankruptcy studies. The first, a small study conducted in 1988 by COMNAVAIRPAC, looked at active duty Navy and Marine Corps personal bankruptcies filed at the San Diego bankruptcy court [Ref. 7]. The second, The Consumer Bankruptcy Project, is a large seven year project which involved over a quarter million pieces of information from 1529 bankruptcy cases filed in 1981. This project, the most in-depth study located, culminated in the highly regarded book be Sullivan, Warren, and Westbrook, *As We Forgive Our Debtors.* [Ref. 6:p. 342] These two studies provided a workable blueprint from which a sampling plan was designed.

Based upon a review of the above two studies and a study conducted by Philip Shuchman, *The Average Bankrupt: A Description and analysis of 753 Personal Bankruptcy Filings in Nine States*, it was decided to design a microdata study that focused on individual debtors [Ref. 18]. This approach, although costly and time consuming, was the only alternative that would support profiling the typical active duty Navy sailor who files bankruptcy. The approach required traveling to the individual bankruptcy courts and collecting data on the characteristics of bankrupt Navy debtors from their bankruptcy petitions. This approach was necessitated by the lack of easily obtainable public data on personal bankruptcy filings.

Much of what is known about personal bankruptcy comes from reports issued by the Administrative Office of the U.S. Courts. These reports are limited in scope and include only aggregate demographic data on bankruptcy filings. This information includes the number of filings, a breakdown of filings by chapter filed, whether the case was filed singly or jointly, and whether the case is a business or nonbusiness bankruptcy. No other significant information on personal bankruptcy is regularly recorded. [Ref. 6:p. 16] Thus, the only way to obtain information about the characteristics of people who file bankruptcy is to review the individual cases.

The fact that so little information is available on personal bankruptcy filings is disturbing when one considers that one in every 110 households in the U.S. filed for personal bankruptcy in 1991 [Ref. 2:p. 23]. Personal bankruptcy has become the consumer financial issue of the 1990s. Professor Elizabeth Warren sums up the irony associated with the lack of bankruptcy information.

> Information is critical to making good decisions. In most areas, the government makes basic information available, providing a reliable basis for understanding at least the fundamental operation of the system. Moreover, the government's own policies are set, in part, based on the data collected and reported. Currently, the government develops and reports extensive data about international trade, employment rates, tax revenue,

interest rates, and dozens of other subjects. In bankruptcy, the only information regularly available is the number of filings.

The policies of the federal government depend on making good decisions. And good decisions depend on good data. Those who need to make decisions about bankruptcy currently have too little information available. [Ref. 19 :p. 20]

B. THE ORGANIZATIONAL STRUCTURE OF THE U.S. BANKRUPTCY COURT SYSTEM

The U.S. bankruptcy court is a subset of the federal court system. The federal court system is divided up by individual state. Each state is then divided into bankruptcy districts. Although some states, such as South Carolina, have just one bankruptcy district that provides coverage for the whole state, most states are divided into two or more federal districts. For example, the state of California has four bankruptcy districts; the Southern, Middle, Northern, and Central districts.

In addition, many bankruptcy districts are further split up into smaller geographic units called divisions. In general, bankruptcy divisions are assigned counties for which they are responsible for. Individuals who file bankruptcy will file their petition with the court assigned jurisdiction over the county in which they reside. For example, the Florida Middle Bankruptcy District has jurisdiction over two separate courts. It is responsible for all bankruptcy cases filed at the district court located in Tampa, Florida, and the cases filed at the bankruptcy division court located in Jacksonville, Florida. The Jacksonville Bankruptcy Division of the Middle Bankruptcy District of Florida is responsible for all the bankruptcy cases filed in the 16 counties assigned to the division.

C. DATA SHEET DEVELOPMENT

In preparation for the data gathering trips, a detailed data sheet was created. The collection of forms was called the Bankruptcy Data Sheet, and a copy is provided in Appendix A. An explanation of the variables recorded on the Bankruptcy Data Sheet can be found in Appendix B, which is a copy of the Computer Bankruptcy Database Codebook developed for the research.

A separate Bankruptcy Data Sheet was used to record the variables associated with each bankruptcy case that qualified for the sample. The variables to be recorded were chosen on the basis of a review of the required data in two separate sets of blank bankruptcy forms.

The U.S. court system does not supply bankruptcy forms, or mandate a specific format to be used when filing bankruptcy. Rather, the forms are commercially produced and can be purchased at a legal stationery store. This results in a wide variety of formats being used to file bankruptcy and, as can be expected, a good deal of data inconsistency from case to case.

In general, most sets of bankruptcy forms reviewed while conducting the research were similar in content, but they varied significantly in the presentation of the data. As a result, additional time was required to locate the data recorded in the Bankruptcy Data Sheet. Another obstacle presented by the many different bankruptcy petition formats was that some of the variables that the researcher had hoped to collect at the start of the research were not available in sufficient quantity to analyze. In spite of the obstacles mentioned above, the researcher was able to record approximately 120 variables for each of the 96 bankruptcy cases which composed the sample. This provided over 10,000 pieces of information for analysis.

D. PILOT STUDY

Prior to traveling to the sample locations to obtain the data on active duty Navy personnel bankruptcies, a pilot study was conducted at the bankruptcy court located nearest to the Naval Post Graduate School. A three day pilot study was conducted at the San Jose, California Bankruptcy Division of the California Northern District Bankruptcy Court. The purpose of this pilot study was to test the Bankruptcy Data Sheet used to record information, gain an understanding of the time required to locate and record the information in a bankruptcy case, and provide the researcher a "feel" for the data.

Due to the small Navy population in the counties covered by the San Jose bankruptcy division, the sample selection criterion was expanded from just active duty Navy personnel to include all active duty military personnel who file personal bankruptcy. This greatly increased the probability of sampling a bankruptcy case which met the sampling criterion, since the Fort Ord military population was now included. The actual sampling method utilized will be explained in the next section.

At the San Jose court, 422 bankruptcy cases were reviewed, from which a sample of 14 active duty military bankruptcy cases was identified. The data from these 14 cases was recorded on Bankruptcy Data Sheets, but not analyzed.

The pilot study was very helpful, as it allowed the sampling process to be fine-tuned prior to the actual sample. Upon completion of the pilot study, it was evident that the Bankruptcy Data Sheet could extract most of the data contained within the bankruptcy files and that a meaningful sample could be obtained within the financial and time constraints of the research.

E. SAMPLE LOCATION AND SAMPLE SIZE

The scope of the research was limited by financial and time constraints. The pilot study confirmed that the research was feasible, but it would be very time consuming. Time would have to be spent on recording information from the active duty Navy bankruptcy cases, after first identifying them from the thousands of cases filed each year.

The key to statistical research is variation and randomness. With enough money and time, the ideal arrangement would be to sample Navy bankruptcy cases from all over the United States. If this sample revealed the same results for several different locations, then one would have a great deal of confidence in generalizing from the aggregate sample to the entire Navy population. The greatest relative increase in sample quality is achieved by increasing the number of sample locations from one to two, and then comparing the results from the different sites. [Ref. 20:p. 26]

It was decided to sample bankruptcy cases from two independent locations. The pilot study showed that approximately 50 active duty Navy bankruptcy cases could be identified and recorded in a five day work week. Thus, two full weeks were allocated to obtaining the desired sample of approximately 100 active duty Navy bankruptcy cases.

Actual sample locations were based on the size of the Navy population within a bankruptcy court's jurisdiction and Variable Housing Allowance (VHA) rates. VHA rates were used as a measure of the cost of living in the proposed sample locations. The higher the VHA rate, the higher the assumed cost of living. It was desired to sample from a low cost and a high cost living area to check for any differences in bankruptcy filings between the two areas. In addition, sample locations were required to have large enough Navy populations to provide reasonable assurance that a random sample of approximately 50 active duty Navy bankruptcy cases could be identified within the time constraints of the research.

The sample collection points chosen were the Jacksonville, Florida division bankruptcy court and the San Diego, California district bankruptcy court. Table IV is a summary of the criteria used to choose sample locations.

TABLE IV CRITERIA USED IN DETERMINING SAMPLE LOCATIONS

Sample Point	1991 VHA Rate (Note 1)	Active Duty Navy Population (Note 2)	Counties In the Court's Jurisdiction
San Diego, California	$189.23	86,502	San Diego, Imperial
Jacksonville, Florida	$73.78	26,193	(Note 3)

Note 1: VHA rate is for an E-6 without dependents.

Note 2: Population figures are from a DEERS database that lists populations by zipcode. Zipcodes were correlated with counties using a 1990 Rand McNally Business Planning Atlas.

Note 3: Baker, Bradford, Citrus, Clay, Columbia, Duval, Flagler, Hamilton, Marion, Nassau, Putnam, St. Johns, Sumter, Suwannee, Union, and Volusia

The difference between the VHA rates is a factor of 2.6. The researcher feels that this difference is large enough to classify the San Diego sample as one from a high cost of living area and the Jacksonville sample as one from a low cost of living area.

The San Diego area has been proclaimed the largest military complex in the free world. It is host to approximately 18 percent of the active duty Navy personnel worldwide, and over one-sixth of the Navy's combatant fleet is homeported in the area. [Ref. 21:p. 2] Some of the larger Naval installations located in the area include Naval Station North Island, Miramar Naval Air Station, Naval Air Facility El-Centro, Naval Station San Diego, San Diego Naval Base, Naval Amphibious Base Coronado, Point Loma Submarine Base, and the Naval Training Center.

The Jacksonville area is host to approximately five percent of the active duty Navy personnel worldwide [Ref. 22]. Some of the larger Naval installations in the area include Mayport Naval Station, Cecil Field Naval Air Station, and Jacksonville Naval Air Station.

F. TIMING

The samples were drawn from bankruptcies filed in 1991. A one to two year lag between sampling cases and when they were first filed increased the probability that the bankruptcy cases were as complete as they could be. However, this time lag also created problems at the San Diego court.

Once a bankruptcy case is closed, the file is required to be maintained for 20 years. Most bankruptcy courts are limited in the amount of storage space they have and, consequently, only maintain files on bankruptcy cases which are open. The closed cases are boxed up and sent to a federal records warehouse to make room for new bankruptcy cases.

The San Diego bankruptcy court is very aggressive in shipping its closed cases to the federal records warehouse in Laguna-Niguel, California. As a result, the San Diego data gathering trip involved sampling bankruptcy cases at both the bankruptcy court in San Diego and the federal records warehouse in Laguna-Niguel. Of the 700 bankruptcy cases sampled at the San Diego court, only 203 were still on file at the court house. The remaining 497 were in storage at the federal records warehouse.

The Jacksonville bankruptcy court still had all its 1991 bankruptcy cases on file at the court house. All of the 1324 bankruptcy cases sampled at the Jacksonville court were available at the Jacksonville court house.

G. SAMPLING METHOD

It was desirable to sample the 1991 bankruptcy cases in such a manner that the sample would permit generalizations to be made about the population from which it was drawn. This requirement for a representative sample initially led the researcher to consider a simple random number sampling routine utilizing random numbers assigned to each case. However, this quickly proved to be a long and tedious process, due to the size of the population and the use of manual procedures. An alternative to simple random sampling is systematic sampling, which, when done properly, is a good approximation of simple random sampling.

Systematic samples, in theory, are really complex samples with unknown properties which may be substantially different from simple random samples. However, the practical answer is that, in cases for which simple random sampling is appropriate, systematic sampling will yield about the same results except in very unusual situations of periodicity. [Ref. 20:p. 56] A review of the bankruptcy case chronological lists used in the systematic sampling routine revealed no problems of periodicity.

Every court files bankruptcy cases chronologically. The first case filed in 1991 would receive a case number such as 91-0001, while the last case filed in 1991 would be 91-7012. This filing method indicates that 7012 bankruptcy cases were filed at the court from January to December, 1991.

To do systematic sampling with a chronological list requires two things, the calculated sampling interval and a random number between one and the calculated sampling interval with which to initiate sampling. In the simplest case, the sampling interval **i** is merely the ratio, **i = N/n**, where **N** is the number of elements in the chronological list, and **n** is the desired sample size. A table of random numbers is used to select the initial starting point which will be between one and **i**. This number is called the "random start," and it ensures that every case on the list has an equal chance of selection. The first case selected for the sample is the random start number. The second case selected is the random start number plus the sampling interval. The third case selected is the second case number plus the sampling interval. This sequence repeats itself until the sampling interval has been applied to the entire chronological list.

The above description of systematic sampling assumes that all the cases listed on the chronological list are eligible for the sample. This was not true for the sample of active duty Navy bankruptcy cases. The 1991 chronological listing of bankruptcy cases maintained by the courts include both business and nonbusiness cases, as well as bankruptcy cases filed under chapters other than Chapter 7 and 13. The only cases eligible for the researcher's sample were nonbusiness Chapter 7 and 13 bankruptcies filed by active duty Navy personnel. Thus, if one does not adjust the sampling interval for the proportion of cases eligible for the sample, the desired sample size will not be obtained.

The problem of ineligible cases is solved by adjusting the sampling interval to account for the expected number of ineligible cases. If the percentage of cases eligible for a sample is known, then the new sampling interval is, **i = N*P/n**, where **P** is the percentage of cases eligible for the sample. The sampling calculation used to calculate the sampling interval for the active duty Navy bankruptcy cases is as follows:

$$i = \frac{N*P1*P2}{n}$$

where:
- i = The required sampling interval.
- N = The total number of all bankruptcy cases filed in 1991.
- P1 = The percentage of cases that are nonbusiness Chapter 7 and 13 bankruptcy filings.
- P2 = The estimated percentage of active duty Navy bankruptcy cases filed in 1991.
- n = The desired sample size.

The sampling parameters, **N** and **P1**, were derived from the data in Table V. **P1** was calculated from the following formula:

$$P1 = \frac{T-X}{N}$$

where:
- T = The total number of nonbusiness filings in Table V.
- X = The number of nonbusiness Chapter 11 filings in Table V.
- N = The total number of all bankruptcy filings in Table V.

The sampling parameter, **P2**, was obtained from estimates provided by the trustees responsible for administering the bankruptcy cases at the sample locations. The actual role played by the trustee in a bankruptcy case is described in

Table V BUSINESS AND NONBUSINESS BANKRUPTCY FILINGS FOR 1991

Location	Total Filings	Total Nonbusiness filings	Nonbusiness Chapter 7	Nonbusiness Chapter 13	Non-business Chapter 11
Jacksonville, Florida	6,786 (Note 1)	6,390	5,480	889	21
San Diego, California	14,779	14,110	8,986	5,043	81

Note 1: The number obtained from the report was 6767. The number used in the table and calculations was from Elenora Barbara, Divisional Chief of the Jacksonville bankruptcy court. It was determined to be a more reliable source. The difference is insignificant in the calculations.

Source: Administrative Office of the U.S. Courts, Table F-5A, 1991.

Chapter III. This parameter proved to be the biggest uncertainty in the sampling calculation, as it was only an estimate of the percentage of bankruptcy cases filed by active duty Navy personnel. However, this uncertainty was somewhat reduced by contacting four trustees at each of the sample locations and using an average of the four individual estimates provided by the trustees.

The sampling parameter **n** used in the calculation was 50. The constraints associated with the sample size have already been discussed. Table VI is a summary of all the parameters used in the initial sampling calculation.

Table VI SUMMARY OF THE INITIAL SAMPLE CALCULATIONS

Location	N	P1	P2	n	i	# Cases Initially Sampled (Note 1)
San Diego	14,799	.949	.10	50	28	527
Jackson-ville	6,786	.939	.5	50	6	1,131

Note 1: Calculated from dividing **N** by **i**.

The critical assumption in the sampling calculation is **P2**, the estimated percentage of active duty Navy bankruptcy cases filed in 1991. If this estimate is higher than the actual active duty Navy filing rate, the calculated sampling interval will produce a sample less than the desired sample size. This occurred at both sample locations. As a result, a second sampling calculation was done in order to obtain, as close as possible, the desired sample size of 50 cases.

The new sampling calculation used a more accurate **P2** that was derived from the results of the first sampling iteration. In addition, the desired sample size was reduced in the calculation to reflect only the additional cases still needed to obtain the desired sample size of 50 active duty Navy bankruptcy cases.

Besides being easier than simple random sampling, systematic sampling of all the cases filed in 1991 would reveal any seasonal bias associated with bankruptcy filings. However, limiting the sample to cases filed in 1991 prevented an analysis of trends in active duty Navy bankruptcy filing rates.

H. DATA COLLECTION

The arrangements for the pilot study and two data gathering trips proved to be a larger hurdle than initially estimated. It was critical to the success of the research that five days of data gathering time be available at each of the sample points. This required taking care of the many preliminary details of the research by phone and letter. Had the researcher been able to visit the courts prior to the sample, many of the problems associated with planning the research could have been quickly solved.

The pilot study at the San Jose, California bankruptcy court was conducted from 17 to 19 February, 1993. The first data gathering trip was to the Jacksonville, Florida bankruptcy court and was conducted from 07 to 13 March, 1993. The second data gathering trip was to the San Diego, California bankruptcy court and the Laguna-Niguel, California federal records warehouse. It was conducted from 21 to 27 March, 1993, with two days spent at the San Diego bankruptcy court, and three days at the Laguna-Niguel warehouse.

I. DATA VERIFICATION CHECKS

As previously mentioned, the researcher was confronted with a large amount of data inconsistency in the bankruptcy cases sampled. Some active duty Navy bankruptcy petitions were very complete and had copies of the debtors' Leave and Earnings Statements (LES) included with the petitions. This greatly simplified the data gathering task. Other bankruptcy cases had incomplete information in them. Some debtors merely listed their employer as the Navy. This led to the question as to whether the bankruptcy case was filed by an active duty sailor or a civilian employee of the Navy. In some cases, a thorough review of the bankruptcy petition provided amplifying data to answer this question. If this was unsuccessful, an on-line military recruiter data base was used to answer this question. By entering the debtor's social security number, the data base could be used to reveal whether or not the debtor was on active duty in 1991. Special care was exercised while gathering data to ensure that civilian employees of the Navy were not included in the sample.

Another significant problem occurred when trying to determine the debtor's income. The bankruptcy forms require the debtor to list his income. However, income varies significantly between individuals in the Navy. Some individuals live in government housing and do not get a housing allowance (BAQ and VHA), while others live out in the community and do. Some personnel receive Selective Reenlistment Bonus (SRB) payments or specialty pay, such as Hazardous Duty Incentive (HDI) pay. After sampling 96 active duty Navy bankruptcy cases, the researcher did not feel that the income data provided in the bankruptcy petitions was accurate enough to be statistically analyzed.

However, this problem was overcome by using information on actual earnings and allowances available at the Defense Manpower Data Center (DMDC). The debtors' social security numbers were recorded for the active duty Navy bankruptcy cases sampled. The social security numbers were entered into a data file which was then crossed with data files available at DMDC. This provided a large additional volume of information about the debtors in the sample groups.

The resources available at DMDC are enormous. With an individual's social security number, they have the capabilities to generate a large amount of data about that individual. Due to time constraints, data were requested from only three of their many data bases. An analyst from DMDC worked for four days to support this research. He pulled data from the following three files: the Active Duty Military Inventory File, the Active Duty Military Loss File, and the Active Duty Military Pay File (JUMPS). Table VII is a listing of the information about the debtors provided by DMDC. This information was used to validate and supplement the information gathered directly from the bankruptcy cases.

TABLE VII DEBTOR INFORMATION PROVIDED BY DMDC

Home of Record	Duty Occupation
Ethnicity	Security Classification
Number of Dependents	Time in Service
Paygrade	Security Investigation
Primary Occupation	Monthly Pay (Base, BAQ, BAS. . .)

J. DATA ANALYSIS

The data collected from the active duty Navy bankruptcy cases, and recorded on the Bankruptcy Data Sheets, were then coded and analyzed on a personal computer. The software package used for both entering and analyzing the over 10,000 pieces of data was SPSS for Windows, Release Five.

The majority of statistical analysis done on the data focused on trying to profile, if possible, the average debtor. In support of this goal, measures of central tendency, measures of dispersion, hypothesis testing, nonparametric tests, and frequency distribution analysis were the primary statistical methods used. The two sample groups were analyzed separately, and the results compared using One-Way Analysis of Variance (ANOVA) tests, Two Sample T tests, and nonparametric tests to detect any differences between the sample groups.

In addition, where appropriate, the statistical results obtained were compared with the results of the following studies: (1) The 1981 Consumer Bankruptcy Project conducted by Sullivan, Warren, and Westbrook [Ref. 6]; (2) *A Study of Navy and Marine Corps 1988 Personnel Bankruptcy Cases in the Southern District of California* by Catherine Nicholson [Ref. 7]. The data from these studies used in comparisons with the sample data were adjusted by Consumer Price Indices (CPI) so that all dollar figures were stated in 1991 dollars.

K. LIMITATIONS

The filing of bankruptcy is merely the final step associated with an individual's financial difficulties. The bankruptcy petition provides a lot of information about an individual's financial distress, but it fails to list the dominant reasons which cause an individual to file bankruptcy. Although this information can sometimes be inferred from the data in the bankruptcy case, the conclusion reached is still based on the researcher's judgement. The fact that a married debtor has $30,000 in credit card debt says nothing about whether the debt was a mutual decision between spouses, or if it was accumulated by a debtor's spouse while he was on deployment.

This type of information is only available by actually interviewing the debtors in the sample groups. Due to time constraints, the researcher did not pursue this approach. However, had he been able to interview the debtors, a more complete picture of the circumstances leading up to bankruptcy could have been obtained. The researcher feels that, with adequate time and utilizing the resources available at DMDC, the debtors in the sample groups could be located and interviewed in an attempt to learn more about their bankruptcy cases. This assumes that the debtors would agree to be interviewed about their bankruptcy cases.

A second limitation of this research is that none of the supporting actors in the bankruptcy process were interviewed. Interviewing a sample of the lawyers, trustees, and bankruptcy judges working at the sample locations could provide useful information to supplement the understanding obtained from the data in the bankruptcy cases. It's possible that these interviews would reveal why some of the differences exist between the two sample groups.

The third limitation of this research deals with the data analysis. The researcher is not a statistician and consequently, limited statistical analysis of the data was performed. The results obtained from the limited analysis conducted are sufficient to meet the requirements of this study. However, a trained statistician may be able to conduct a more in-depth statistical analysis of the data and provide an even better understanding of the factors associated with active duty Navy bankruptcies.

V. DATA ANALYSIS AND DISCUSSION

A. INTRODUCTION

This chapter presents the results obtained from the analysis conducted on the 96 active duty Navy bankruptcy cases sampled at the Jacksonville, Florida and San Diego, California bankruptcy courts. In addition, a discussion of the results obtained for each variable analyzed will immediately follow the statistical results. The researcher believes this format will provide readers a better understanding of the data, as over 60 variables will be discussed for each of the two sample groups.

Data was recorded on over 120 variables for each active duty Navy bankruptcy case sampled. From these variables, several new variables were calculated in an attempt to better understand the factors contributing to personal bankruptcy within the Navy. For example, debt-to-income ratios were calculated from the original data for each case. However, not all the data obtained during sampling was analyzed. Due to data inconsistencies, numerous missing observations, and project time constraints only 66 of the original targeted variables were analyzed. For example, data was recorded on the individual components of a debtor's living expenses, but only housing and total expenses were analyzed. The variables chosen by the researcher to be analyzed were the ones he thought would be of most importance to the reader.

The data collected from the active duty Navy bankruptcy cases was analyzed on a personal computer. The software package used was SPSS for Windows, Release Five. The majority of statistical analysis done focused on trying to profile, if possible, the average Navy debtor. In support of this goal, measures of central tendency, measures of dispersion, hypothesis testing, nonparametric tests, and frequency distribution analysis were the primary statistical methods used. The two sample groups were analyzed separately, and the results compared using One-Way Analysis of Variance (ANOVA) tests, Two Sample T tests, and nonparametric tests to detect any differences between the sample groups. All statistical testing was done using a 95 percent confidence level.

The results of the comparison tests done on the two samples only provide information as to whether or not the groups are different. They do not provide conclusive evidence that the groups are the same. From a purely statistical view point, it would be inappropriate to say the two groups are identical if hypothesis testing reveal they are not different. Thus, even if the results were nearly identical between the two groups, the fact still remains that the two samples were drawn from two separate populations. The researcher notes that the combined Navy population in the Jacksonville and San Diego areas represent approximately 23 percent of the total

Navy population. In addition, these two areas are representative of the Navy on the whole, as the surface, air, and submarine communities are represented at one or both of the locations. The researcher does not intend to make any inferences from the results obtained from the statistical analysis of the two sample groups to the entire Navy population. Rather, he will leave it up to the reader to evaluate the information provided and draw his own conclusions about the applicability of the results of this study to the entire Navy population.

The remainder of this chapter presents the statistical analysis and discussion of the variables analyzed. The format used for each variable is as follows. First, the results from the Jacksonville sample are presented. Second, the results from the San Diego sample are presented. And finally, a discussion of the results obtained concludes the analysis of the variable. If applicable, comparisons of the results are made with other bankruptcy studies. The data from the studies used in comparisons were adjusted by Consumer Price Indices (CPI) so that all dollar figures are stated in 1991 dollars.

B. GENERAL DEBTOR INFORMATION

This section presents the results of the analysis conducted on the general characteristics of the 96 active duty Navy bankruptcy cases sampled. Information such as chapter filed, date filed, marital status, number of years of active duty service, rank, and so forth is presented. In addition, a detailed analysis of the active duty Navy bankruptcy filing rates in Jacksonville and San Diego is provided.

1. Filing Percentage

a. Jacksonville

Of the 1,324 bankruptcy cases sampled, 51 were filed by active duty Navy personnel. Thus, 3.9 percent of the sample were Navy cases. Using 3.9 percent to estimate the total number of active duty Navy bankruptcy cases filed in Jacksonville in 1991, the total number of bankruptcy cases filed by active duty Navy personnel would be 261. This number is 1.0 percent of the 26,193 active duty Navy personnel who live in the counties within the jurisdiction of the Jacksonville bankruptcy court [Ref. 22]. The researcher is 95 percent confident that the true percentage of all bankruptcy cases filed in Jacksonville by active duty Navy personnel is between 2.8 and 4.9 percent.

The total population of persons 16 years and over who live in the 16 counties within the jurisdiction of the Jacksonville bankruptcy court is 1,435,533 [Ref. 23].[2] Adjusting the population figure for the 26,193 active duty Navy personnel, and the 6786 total bankruptcy cases filed in

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[2] People who file bankruptcy are required to be over 18 years of age. However, the researcher was unable to find population data for people over 18 years of age. As a result, he used the best information available, which was for persons over 16 years of age, obtained from the 1990 Census of Population and Housing.

1991 for the estimated 261 Navy cases, the percentage of the civilian population which filed bankruptcy is .46 percent [Ref. 14].

Another way to compare the active duty Navy and civilian filing rates is to consider that active duty Navy personnel accounted for 1.8 percent of the total population eligible to file bankruptcy, but filed 3.9 percent of all the bankruptcy cases. By either of these methods, it appears that sailors file bankruptcy more often than the civilian population.

b. San Diego

Of the 700 bankruptcy cases sampled, 45 were filed by active duty Navy personnel. Thus, 6.4 percent of the sample were Navy cases. Using 6.4 percent to estimate the total number of active duty Navy bankruptcy cases filed in 1991, the total number of bankruptcy cases filed in San Diego by active duty Navy personnel is 947. This number is 1.1 percent of the 86,502 active duty Navy personnel who live in the two counties within the jurisdiction of the San Diego bankruptcy court [Ref. 22]. The researcher is 95 percent confident that the true percentage of all bankruptcy cases filed by active duty Navy personnel in San Diego is between 4.6 and 8.2 percent.

The total population of persons 16 years and over who live in the two counties within the jurisdiction of the

San Diego bankruptcy court is 2,022,789 [Ref. 24]. Adjusting the population figure for the 86,502 active duty Navy personnel, and the 14,799 total bankruptcy cases filed in 1991 for the 947 Navy cases, the percentage of the civilian population which filed bankruptcy is .72 percent [Ref. 14].

Another way to compare the active duty Navy and civilian filing rates is to consider that active duty Navy personnel account for 4.3 percent of the total population eligible to file bankruptcy, but filed 6.4 percent of all the bankruptcy cases. By either of these methods, it appears that sailors file bankruptcy more often than the civilian population.

c. Comparison and Discussion

The data provides evidence that the San Diego active duty Navy bankruptcy filing rate is greater than the Jacksonville active duty Navy bankruptcy filing rate. The researcher is 95 percent confident that the true difference between the San Diego and Jacksonville active duty Navy bankruptcy filing rates is between 0.5 and 4.6 percent. A possible reason for this difference is the higher cost of living in the San Diego area as compared to the Jacksonville area. As mentioned in Chapter III, the San Diego area had a VHA rate 2.6 times greater than the VHA rate in the Jacksonville area.

The active duty Navy bankruptcy filing rate of 6.4 percent in San Diego is lower than the active duty Navy bankruptcy filing rate of 6.8 percent obtained in the 1988 San Diego bankruptcy study [Ref. 7:p. 9]. However, the two studies do not provide sufficient evidence that the percentage of active duty Navy bankruptcy cases filed in San Diego in 1991 is less than the percentage of bankruptcy cases filed in 1988.

2. Chapter Filed

The variable CHAPTER was used to record the active duty Navy bankruptcy cases as either Chapter 7 or Chapter 13 cases. All of the active duty Navy bankruptcy cases sampled were filed under Chapter 7 or 13 of the bankruptcy code. There were no nonbusiness Chapter 11 bankruptcy cases identified in the samples.

a. Jacksonville

Table VIII provides the results of the analysis for both the active duty Navy sample and all of the nonbusiness bankruptcy filings at the Jacksonville court. There were not enough Chapter 13 cases in the sample to estimate the true percentage of Chapter 13 cases filed by active duty Navy personnel. However, the data does provide evidence that sailors who file bankruptcy in Jacksonville will file Chapter 13 bankruptcy less than the civilian population.

TABLE VIII FREQUENCY OF CHAPTER FILED IN BANKRUPTCY

	Active Duty Navy Sample Results				**Population Results**	
Location	**Chap 7 %**	**Chap 13 %**	**# of Chap 13 Cases**	**# Chap 13 Failures (Note 1)**	**Chap 7 %**	**Chap 13 %**
Jackson-ville	94.1	5.9	3	3	85.8	13.9
San Diego	48.9	51.1	23	8	63.7	35.7

Note 1: These are Chapter 13 bankruptcy cases which were failures as of the sampling date of March, 1993. Chapter 13 repayment plans can run for five years; thus it is possible that more Chapter 13 cases will fail.

Source: Administrative Office of the U.S. Courts, Table F-5A, 1991.

b. San Diego

Table VIII displays the results for both the active duty Navy sample and all of the nonbusiness bankruptcy filings at the San Diego bankruptcy court. The researcher is 95 percent confident that the true percentage of Chapter 13 cases filed by active duty Navy personnel is between 38.9 and 63.3 percent. The data provides evidence that sailors who file bankruptcy in San Diego will file Chapter 13 more often than the civilian population.

c. Comparison and Discussion

The data provides evidence that the filing percentage of active duty Navy Chapter 13 cases filed at

Jacksonville is less than the filing percentage of active duty Navy Chapter 13 cases in San Diego, and the filing percentage of active duty Navy Chapter 7 cases filed at Jacksonville is greater than the filing percentage of active duty Navy Chapter 7 cases in San Diego. The 1988 San Diego bankruptcy study looked at both Navy and Marine Corps personnel who filed bankruptcy. The researcher was able to derive some Navy specific data from the study, but the majority of results are for a sample which included both Navy and Marine Corps personnel. Given that this is the only military specific reference located by the researcher, it was used for comparison purposes with his San Diego sample results. However, the reader is cautioned that, unless stated otherwise, the results from the 1988 San Diego bankruptcy study are for a sample of both Navy and Marine Corps personnel, while the researcher's San Diego sample only includes Navy personnel.

The percent of Navy and Marine Corps bankruptcies filed under Chapter 13 in the 1988 San Diego bankruptcy study was 48 percent [Ref. 7:p. 10]. This is almost identical to the percentage obtained in the researcher's San Diego sample. In 1988, the percentage of all bankruptcy cases that were filed under Chapter 13 at the San Diego bankruptcy court was 36 percent [Ref. 7:p. 10].

Both the 1988 San Diego bankruptcy study and the researcher's San Diego sample indicate that sailors in San

Diego file Chapter 13 bankruptcy more than the civilian population. This result makes sense, considering that Chapter 13 is designed for debtors with a regular income who desire to pay their debts, but are currently unable to do so. Active duty Navy personnel have a regular income and a fixed period of employment. They are ideal candidates for Chapter 13 bankruptcy.

Both the employed and unemployed are eligible to file bankruptcy. The 1981 Consumer Bankruptcy Project determined that between 7 and 17 percent of personal bankruptcies are filed by people who are unemployed [Ref. 6:p. 86]. These people would not be eligible to file Chapter 13 bankruptcy as they have no regular income. However, all active duty Navy personnel who file bankruptcy are eligible for Chapter 13 bankruptcy. The results from the San Diego samples are as one would expect.

The above assertions and logic do not hold up when applied to the results obtained from the Jacksonville sample. In this group, only 5.9 percent of the cases filed by sailors were filed under Chapter 13 bankruptcy. Even considering that only 13.9 percent of the total cases filed at the Jacksonville bankruptcy court were filed under Chapter 13, this low number is disturbing. As mentioned earlier, Navy personnel are ideal candidates for Chapter 13 bankruptcy. The question arises, why then was the Chapter 13 bankruptcy filing rate so low in Jacksonville?

As discussed in Chapter III, the filing rates of Chapter 7 and 13 bankruptcy cases vary greatly from state to state. Variables that affect this include different state laws governing bankruptcy exemptions, the amount of public exposure to the bankruptcy process from such things as bankruptcy lawyer advertising, and indirect bias introduced into the bankruptcy process by lawyers, trustees, and judges. The data does not provide the answer as to why the Chapter 13 filing rate is low. However, the very low active duty Navy filing rate of Chapter 13 bankruptcy indicates that a large majority of Navy debtors in Jacksonville are choosing to walk away from their financial obligations rather than trying to repay them.

3. Date Filed

The variable DATE was used to record the month that an active duty Navy bankruptcy case was filed. The data was initially analyzed by month, but this provided no useful information. The data was then coded into quarters and analyzed again. No statistical tests were done on this data. Figure 3 provides the frequency distribution obtained for both the Jacksonville and San Diego samples. The researcher did not detect any significant seasonal variances in the active duty Navy bankruptcy filing rates.

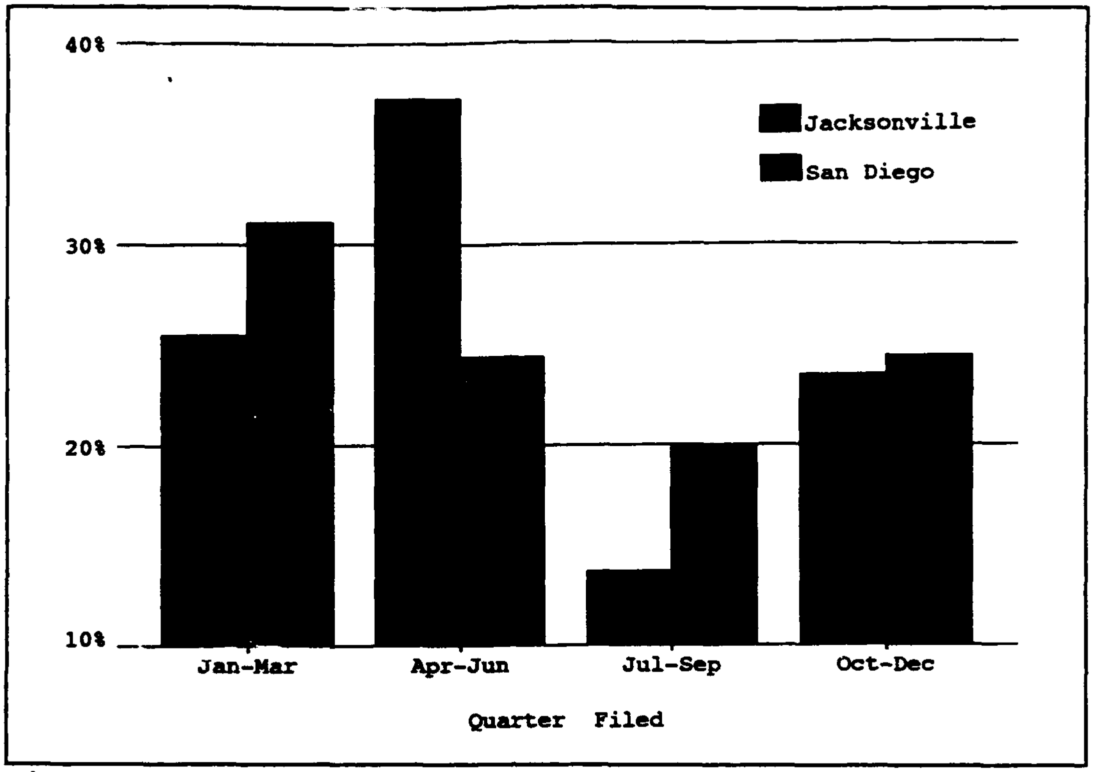

Figure 3 Frequency Distribution of the Quarter That a Sailor's Bankruptcy Case Was Filed

4. Lawyer and Lawyer Fee

The variables LAWY and LAWFEE were used to record whether or not an active duty Navy bankruptcy case was filed with the assistance of a lawyer or a self-help legal office, and the associated cost of this legal assistance.

a. Jacksonville

Table IX provides the results of the frequency analysis conducted. For the 41 debtors who used legal assistance to file bankruptcy, the mean value paid was $442, the median was $500, and the standard deviation was $200. The researcher is 95 percent confident that the mean fee paid for legal assistance for all active duty Navy bankruptcy cases in the Jacksonville area is between $380 and $505.

b. San Diego

Table IX provides the results of the frequency analysis conducted. For the 41 San Diego debtors who used legal assistance to file bankruptcy, the mean value paid was $788, the median was $850, and the standard deviation was $208. The researcher is 95 percent confident that the mean fee paid for legal assistance for all active duty Navy bankruptcy cases in the San Diego area is between $723 and $854.

c. Comparison and Discussion

The data provides evidence that lawyers are used in the San Diego area by sailors to file bankruptcy more than they are used in the Jacksonville area. The researcher believes that the decision to use a lawyer to file bankruptcy

TABLE IX RESULTS OF FREQUENCY ANALYSIS CONDUCTED ON LAWYER

Location	Lawyer Used (%)	Self-Help Legal Office Used (%)	No Legal Assistance Used (%)
Jacksonville	64.7	19.6	15.7
San Diego	88.9	6.7	4.4

is based on the following three factors: (1) what chapter is being filed, as it is easier to file Chapter 7 than Chapter 13 bankruptcy; (2) the knowledge level and capability of the debtor to confidently navigate the bankruptcy process; and (3) the degree of bankruptcy lawyer advertising targeted at potential debtors. Debtor rank data from this study (to be presented later in this chapter) does not substantiate assertion number two as being a reason for the differences between the sample groups. The data from this study does substantiate assertion number 1 as a higher percentage of sailors used lawyers and filed Chapter 13 in San Diego as compared to Jacksonville. The researcher has no data on assertion number 3. However, based on his literature research on bankruptcy he would not be surprised to find the amount of bankruptcy lawyer advertising being greater in the San Diego area.

5. Sex of the Debtor

The variable SEXP was used to record the gender of the debtors in each of the 96 active duty Navy bankruptcy cases sampled. No analysis was done on the data due to the very low percentage of active duty Navy bankruptcy cases filed by females. In Jacksonville, one of the 51 cases in the sample was filed by a female; and in San Diego, five of the 45 cases in the sample were filed by females.

6. Marital Status

The variable MARSTAT was used to record whether or not the debtor was married, single, or divorced in each of the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

Figure 4 provides the frequency distribution from the data. Of particular interest is that only one of the 51 bankruptcy cases was filed by a single sailor.

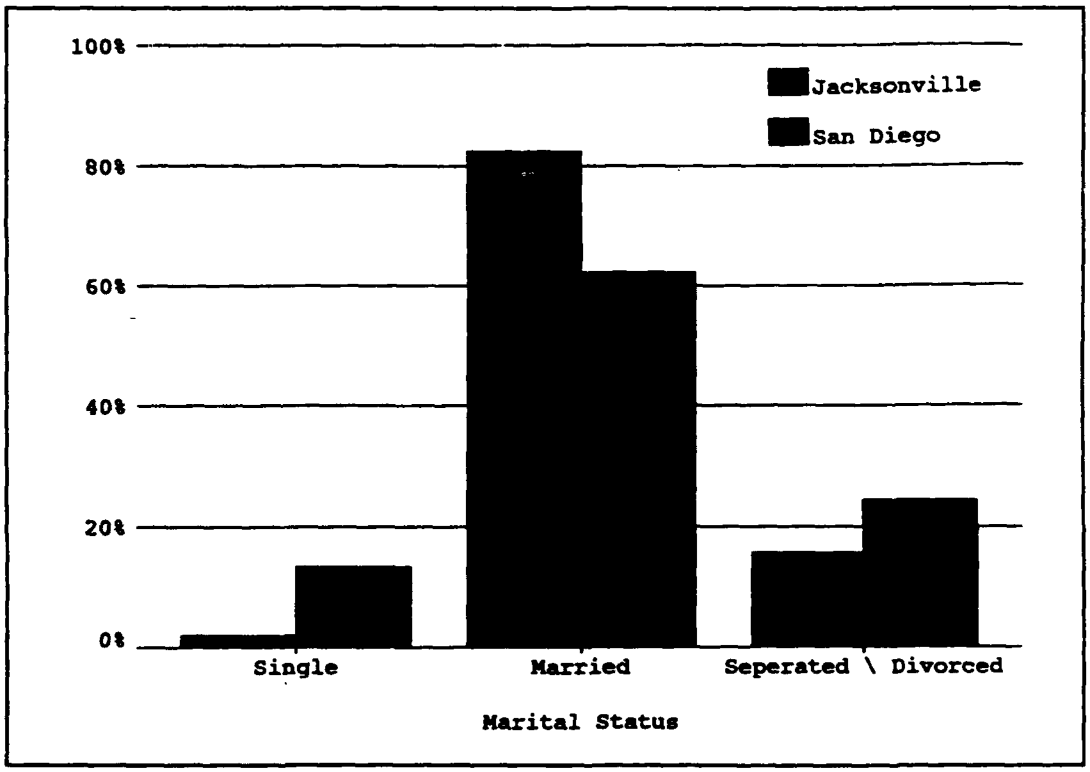

Figure 4 Frequency Distribution of the Marital Status of Sailors Who File Bankruptcy

b. San Diego

Figure 4 provides the frequency distribution from the data. The results vary considerably from the Jacksonville data.

c. Comparison and Discussion

The data provides evidence that the percentage of active duty Navy bankruptcy cases filed by married sailors in Jacksonville is greater than the percentage filed by married sailors in San Diego. However, the data does not provide evidence that the percentage of active duty Navy bankruptcy cases filed by divorced sailors in San Diego is greater than the percentage filed by divorced sailors in Jacksonville. The 1988 San Diego bankruptcy study results were similar to the researcher's San Diego sample, with the exception of divorced results. That study found that only 11 percent of their sample was divorced, while the researcher's San Diego sample found 24.4 percent of active duty Navy bankruptcy filers to be divorced [Ref. 7:p. 18].

Data provided by the Defense Manpower Data Center (DMDC) on marital status percentages for the entire Navy population are as follows: 46.4 percent are single, 53.5 percent are married, and 0.1 percent are unknown [Ref. 21]. This data combines single and divorced statistics. The 1981 Consumer Bankruptcy Project determined that 64 percent of their sample was married at the time of filing bankruptcy

[Ref. 6:p. 245]. Taking all this data into consideration, it tends to indicate that married sailors are more likely to file bankruptcy than single people in the Navy. This is not a hard leap of faith to make considering that, when sailors get married, their living expenses substantially increase. Their incomes may, or may not, increase depending upon whether or not their spouses work. If they do not work, the sailors are faced with a large increase in living expenses and only a marginal increase in income. It is not surprising that married people in the Navy file bankruptcy substantially more often than single people.

7. Number of Dependents

The variable NDEP was used to record the number of dependents other than spouses listed in the 96 active duty Navy bankruptcy cases sampled. No statistical test were done on the data. In Jacksonville, the mean number of dependents was 1.86, the median was 2.0, and the standard deviation was 1.12. In San Diego, the mean number of dependents was 1.76, the median was 2.0, and the standard deviation was 1.37. In both samples, the maximum number of dependents listed was four. The 1988 San Diego bankruptcy study also obtained a mean of two dependents from its sample [Ref. 7:p. 20].

8. Number of Debtors with Prior Bankruptcies

The variable NBKR was used to record the number of active duty Navy personnel in the samples who had filed bankruptcy previously in their lives. No statistical tests were done on this data. In Jacksonville, there were three sailors out of the 51 active duty Navy bankruptcy cases sampled who were filing bankruptcy for the second time in their lives. In San Diego, there were four sailors out of the 45 active duty Navy bankruptcy cases sampled who were filing bankruptcy for the second time. The 1981 Consumer Bankruptcy Project determined that eight percent of their sample had filed a bankruptcy petition at some time in the past [Ref. 6:p. 192].

It is difficult to arrive at the true number of repeat filers since many of the bankruptcy records are incomplete. A person who lists a prior bankruptcy in his petition may, or may not, list the disposition of the case. It is possible that the prior case was a Chapter 13 bankruptcy which was dismissed for failure to make payments, and the debtor filed a new Chapter 7 bankruptcy vice converting the Chapter 13 case into a Chapter 7 case. In this case, it would be inappropriate to consider the debtor a repeat filer, since the debtor never received a discharge from the previous case.

9. Number of Years In the Navy

The variable NYRNAVY was used to record the number of years of active duty service that each sailor had when he filed his bankruptcy case. The data was analyzed in the original format and then coded into groups of four years to provide a more meaningful result.

a. Jacksonville

Figure 5 provides the results of the frequency analysis conducted on the coded data. Using the original data, the mean number of years that a sailor had in the Navy prior to filing bankruptcy was 10.6, the median was 11.0 years, and the standard deviation was 5.1 years. The researcher is 95 percent confident that the mean number of years that a sailor has in the Navy when the sailor files bankruptcy in Jacksonville is between 9.2 and 12.1 years. The data reveals that over 60 percent of the active duty Navy bankruptcy cases sampled were filed by sailors with at least nine years of active duty service.

b. San Diego

Figure 5 provides the results of the frequency analysis conducted on the coded data. Using the original data, the mean number of years that a sailor had in the Navy prior to filing bankruptcy was 9.4, the median was 8.0 years, and the standard deviation was 5.3 years. The researcher is 95 percent confident that the mean number of years that a sailor has in the Navy when the sailor files bankruptcy in San Diego is between 7.8 and 11.0 years. The data reveals that 49 percent of the active duty Navy bankruptcy cases sampled were filed by sailors with at least nine years of active duty

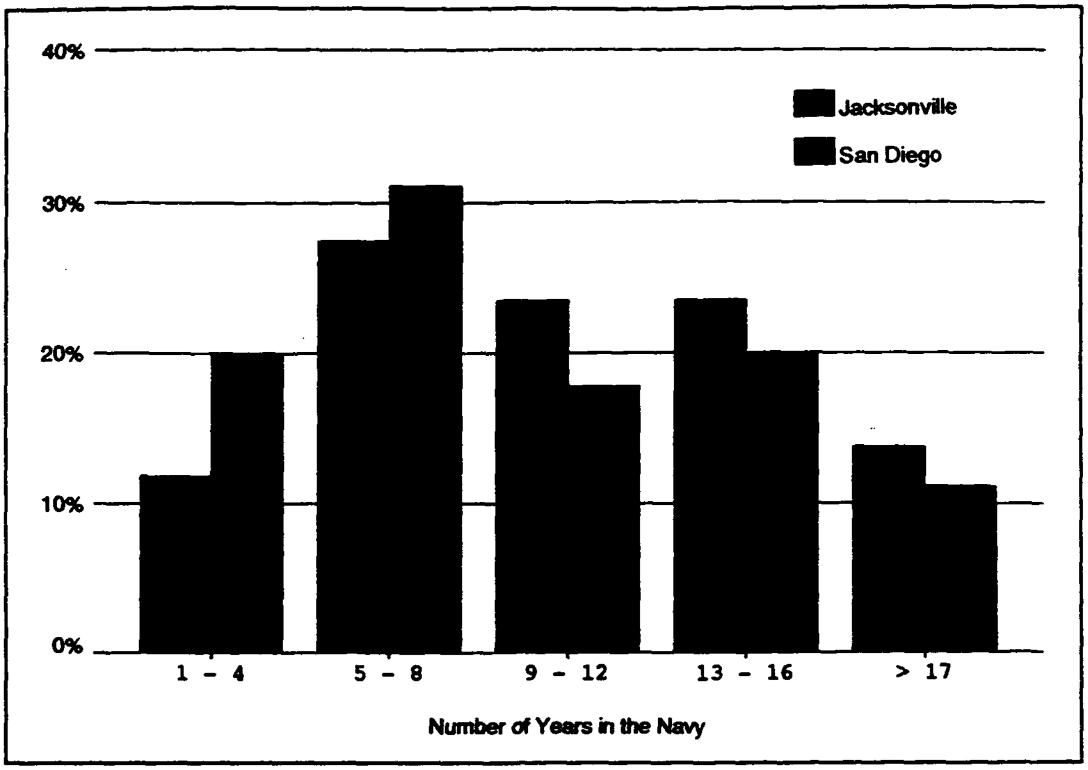

Figure 5 Frequency Distribution of the Number of Years of Service for Sailors Who File Bankruptcy

service.

c. Comparison and Discussion

The data does not provide evidence that the mean number of years of military service for all active duty Navy bankruptcies is different for Jacksonville and San Diego. It appears that in both samples, the average debtor is a career sailor who is on his second or third reenlistment. The results obtained from the analysis of this variable will be reinforced in the next section where debtor rank is analyzed and discussed.

10. Rank

The variable RANK was used to record the rank of the sailors in each of the 96 active duty Navy bankruptcy cases sampled. The data was analyzed in its original format and then coded into four groups to provide a more meaningful result and permit comparisons with the 1988 San Diego bankruptcy study .

a. Jacksonville

Figure 6 provides the results of the frequency analysis conducted on the recoded data. Using the original

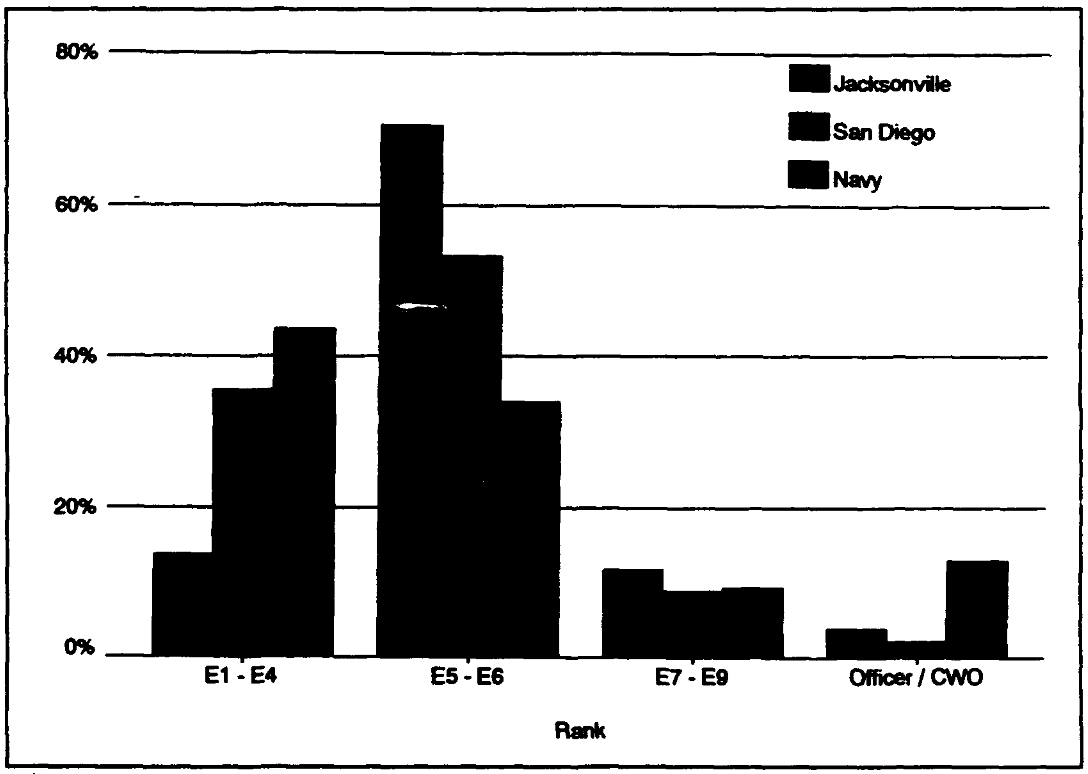

Figure 6 Frequency Distribution of the Rank of Sailors Who File Bankruptcy

data and assigning numerical values to the ranks of the sailors who made up the sample, the mean rank was an E-6, the median rank was an E-6, and the standard deviation was 1.7 ranks. The researcher is 95 percent confident that the mean rank of all sailors who filed bankruptcy in Jacksonville was either an E-5 or E-6. The grouped data reveals that over 86 percent of the active duty Navy bankruptcy cases sampled were filed by sailors with a rank of E-5 or higher. In addition, 71 percent of the active duty Navy bankruptcy cases sampled were filed by sailors with a rank of either E-5 or E-6.

b. San Diego

Figure 6 provides the results of the frequency analysis conducted on the recoded data. Using the original data and assigning numerical values to the ranks of the sailors who made up the sample, the mean rank was an E-5, the median rank was an E-5, and the standard deviation was 1.5 ranks. The researcher is 95 percent confident that the mean rank of all sailors who filed bankruptcy in San Diego is an E-5. The grouped data reveals that over 64 percent of the active duty Navy bankruptcy cases sampled were filed by sailors with a rank of E-5 or higher. In addition, 53 percent of the active duty Navy bankruptcy cases sampled were filed by sailors with a rank of either E-5 or E-6.

c. *Comparison and Discussion*

The data does not provide evidence that the mean rank of active duty Navy personnel who file bankruptcy in Jacksonville is different from active duty Navy personnel who file bankruptcy in San Diego. However, the data does provide evidence that the E-1 to E-4 filing rate percentage of all active duty Navy bankruptcies in San Diego is greater than the E-1 to E-4 filing rate in Jacksonville. In addition, the data provides evidence that the E-5 and E-6 filing rate percentage of all active duty Navy bankruptcies in Jacksonville is greater than the E-5 and E-6 filing rate in San Diego.

Figure 6 also shows the actual distribution of ranks for the entire Navy population. This data was obtained from DMDC. Comparing this data with the results obtained from the researcher's samples would tend to indicate the following: the percentage of E-1 to E-4 sailors who file bankruptcy is less than their actual percentage in the Navy, the percentage of E-5 and E-6 sailors who file bankruptcy is greater than their actual percentage in the Navy, and the percentage of E-7 to E-9 sailors who file bankruptcy is about the same as their actual percentage in the Navy. The results of this study are consistent with the findings of the 1988 San Diego bankruptcy study.

The results from the analysis are disturbing, but not surprising. Sailors in the pay grades of E-1 to E-4 probably have not had time to accumulate a substantial debt burden. They are more likely to be single and living in the barracks or on board ship. Both of these traits substantially reduce one's living expenses, thus increasing the amount of disposable income available for debt repayment. On the other hand, sailors in the pay grade of E-5 and E-6 have had time to accumulate a substantial debt burden and are more likely to be married and have a family to support. These responsibilities cost money and often result in an increased debt burden. The more debt incurred by an individual, the higher the probability is that the person will experience financial difficulties and end up in bankruptcy.

The E-5 and E-6 pay grades can be thought of as the career sailors who are usually on their second or third reenlistments. The Navy has invested substantial time and money in training them for their jobs. [Ref. 7:p. 18] They are given jobs which demand a high level of responsibility, and often involve access to classified information. If these sailors are not responsible enough to manage their own money, one begins to wonder what type of job they should be doing in the Navy.

C. ASSETS

Of the information recorded from the bankruptcy petitions, the researcher feels that the values listed for assets owned by the debtors were the most subjective. Debtors are required to list the market value of all their personal property in their bankruptcy petitions. They make an independent appraisal of their personal property, and unless the court challenges the appraisal, the values they arrive at are used for figuring bankruptcy exemptions. Debtors have an incentive to report low asset values in their petitions to stay within the exemption dollar limits. Of the 70 Chapter 7 bankruptcy cases sampled, only five resulted in the court liquidating assets in excess of the allowed exemptions. All five of these cases were identified in the Jacksonville sample. In four of these five cases, the court challenged the debtors' stated asset values in their bankruptcy petitions and hired professional appraisers to appraise the debtors' personal property. In all four cases, the market value of the debtors' personal property was determined to be substantially greater than the debtors initially claimed in their bankruptcy petitions.

The two exceptions to the uncertainty associated with a debtor's assets are the market value of the debtor's house and automobile. The researcher is confident that these numbers are reliable. All values for assets were recorded at market value.

1. Total Assets Including Houses

The variable ASSETW was used to record the market value of all the assets listed in the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

There were 24 homeowners in the 51 active duty Navy bankruptcy cases sampled. The mean value for total assets was \$34,028, the median was \$18,160, and the standard deviation was \$31,906. The mean is significantly larger than the median as a result of the 24 homeowners in the sample. Whenever the mean and median differ - a phenomenon that recurs throughout the data - it indicates that some debtors are outside the normal distribution pattern and are pulling the mean up above or down below the median [Ref. 6:p. 65].

b. San Diego

There were only seven homeowners in the 45 active duty Navy bankruptcy cases sampled. Of these seven, four of the houses were located outside the San Diego area and were being rented to tenants by the debtors. The mean value of total assets was \$21,898, the median was \$10,400, and the standard deviation was \$30,928.

c. Comparison and Discussion

The 1988 San Diego bankruptcy study determined that the adjusted mean value for total assets was \$22,105 [Ref. 7 :p. 21]. The data does not provide evidence to conclude that there is a difference in mean total assets between the 1988 San Diego bankruptcy study and the researcher's San Diego sample. The 1981 Consumer Bankruptcy Project determined that the adjusted mean value for total assets was $43,984 [Ref. 6 :p. 64].

The data provides evidence that the mean value of total assets is greater in the 1981 Consumer Bankruptcy Project than the researcher's San Diego and Jacksonville samples.

2. Total Assets Without Including Houses

The variable ASSETWO was used to record the market value of all the assets less houses listed in the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

The mean value of total assets less houses was $7,526, the median was $5,310, and the standard deviation was $6,906. The researcher is 95 percent confident that the mean value of total assets less houses for all sailors who file bankruptcy in Jacksonville is between $5,583 and $9,468. The minimum value recorded for an active duty Navy bankruptcy case was $90 and the maximum was $32,120.

b. San Diego

The mean value of total assets less houses was $10,576, the median was $9,300, and the standard deviation was $6,438. The researcher is 95 percent confident that the mean value of total assets less houses for all sailors who file bankruptcy in San Diego is between $8,642 and $12,510. The minimum value recorded for an active duty Navy bankruptcy case was $1,100 and the maximum was $26,040.

c. Comparison and Discussion

The data provides evidence that the mean total assets less houses of sailors who file bankruptcy in San Diego is greater than the mean total assets less houses of sailors in Jacksonville. In the 1988 San Diego bankruptcy study, the mean total assets less houses was $10,362 [Ref. 7:p. 22]. This is almost identical to the researcher's San Diego sample results. The researcher is unable to speculate why the difference exists between the two sample groups. It is possible that it's related to differences between state asset exemption laws, but time constraints prevented the researcher from investigating this.

D. SECURED DEBT

This section presents the results of the two main categories of secured debt which were identified in the 96 active duty Navy bankruptcy cases sampled. These categories are loans for houses and automobiles.

1. Homeowners

The variable HOMEOWN was used to record whether or not the debtors owned a house. The variable HOMERNT was used to record if the debtors were living in the house they owned. This variable was recorded to see if the inability to sell a debtor's house when the debtor transfers from a duty station was a contributing factor to bankruptcy.

a. *Jacksonville*

There were 24 homeowners in the 51 active duty Navy bankruptcy cases sampled. Thus, 47.1 percent of the sample were homeowners. The researcher is 95 percent confident that the percentage of all sailors who file bankruptcy and own houses is between 33.4 and 60.7 percent. None of the 24 homeowners were not presently living in their houses.

b. *San Diego*

There were only seven homeowners in the 45 active duty Navy bankruptcy cases sampled. Thus, 15.6 percent of the sample were homeowners. The researcher is 95 percent confident that the percentage of all sailors who file bankruptcy and own houses is between 4.9 and 26.2 percent. Four of the homeowners were not presently living in their houses.

c. *Comparison and Discussion*

The data provides evidence that the percentage of sailors who own houses and file bankruptcy in Jacksonville is greater than the percentage of sailors in San Diego. In the 1988 San Diego bankruptcy study, 5.1 percent of military members who filed bankruptcy in San Diego owned houses [Ref. 7:p. 22]. The data provides evidence that the percentage of sailor who owned houses and filed bankruptcy in San Diego in

1991 was greater than the percentage of military members who owned houses and filed bankruptcy in San Diego in 1988.

The 1981 Consumer Bankruptcy Project determined that 52 percent of debtors who filed bankruptcy in their sample were homeowners [Ref. 6:p. 129]. This number is very close to the percentage obtained for the researcher's Jacksonville sample. The researcher believes that the reason for the difference between his Jacksonville and San Diego sample results was caused by the high cost of real estate in the San Diego area. The cost of a house in the San Diego area is so high that most sailors do not possess the financial resources to purchase one.

2. Home Mortgage

The variable HOMEMTG was used to record the mortgage for the debtors who owned houses in the 96 active duty Navy bankruptcy cases sampled. The variable HOMEVLU was used to record the market value of a debtor's house.

a. *Jacksonville*

For the 24 sailors who owned houses, the mean mortgage value was $54,551, the median was $59,000, and the standard deviation was $17,244. The researcher is 95 percent confident that the mean mortgage value for all sailors who file bankruptcy and own houses is between $47,270 and $61,833. The mean market value of the debtors' houses was $56,318, the median was $56,508, and the standard deviation was $15,682.

Of the 24 homeowners in the sample, five had second mortgages. The mean second mortgage value was $12,480, the median was $7,200, and the standard deviation was $15,682. The small difference between the mortgage and market value indicates that the debtors had little equity built up in their houses.

b. San Diego

For the seven sailors who owned houses, the mean mortgage value was $54,903, the median was $46,450, and the standard deviation was $28,112. The mean market value of the debtors' houses was $72,785, the median was $70,000, and the standard deviation was $46,159. Of the seven homeowners in the sample, only one had a second mortgage and its value was $49,000.

c. Comparison and Discussion

The data does not provide evidence that there is difference between the mean mortgage value for sailors who file bankruptcy in San Diego and Jacksonville. The reader is cautioned not to conclude that the mean mortgage value in the San Diego and Jacksonville areas are the same. The reader is reminded that four of the seven homeowners in the San Diego sample did not live in their houses, indicating that the houses were not located in the San Diego area.

3. Automobile Loans

The variables NAUTOLN and AUTOLN were used to record the number and value of automobile loans listed in the 96 active duty Navy bankruptcy cases sampled. Automobile leases were counted as auto loans and recorded at the value of the automobile lease.

a. Jacksonville

The mean value of automobile loans for the 41 sailors who listed an automobile loan in their bankruptcy petition was $12,460, the median was $10,580, and the standard deviation was $13,393. The researcher is 95 percent confident that the mean value of automobile loans for all sailors who have automobile loans and file bankruptcy is between $8,232 and $16,686. The mean number of automobile loans for all 51 active duty Navy bankruptcy cases sampled was 1.2. One sailor listed four automobile leases at a value of $82,320. Figure 7 provides the results of the frequency analysis conducted on the number of automobile loans the debtors listed in their bankruptcy petitions.

b. San Diego

The mean value of automobile loans for the 38 sailors who listed an automobile loan in their bankruptcy petition was $11,580, the median was $10,000, and the standard deviation was $6,957. The researcher is 95 percent confident that the mean value of automobile loans for all sailors who have automobile loans and file bankruptcy is between $9,222 and $13,795. The mean number of automobile loans for all 45 active duty Navy bankruptcy cases sampled was 1.2. One sailor listed three automobile loans at a value of $38,560. Figure 7 provides the results of the frequency analysis conducted on the number of automobile loans the debtors listed in their bankruptcy petitions.

c. Comparison and Discussion

The data does not provide evidence that there is a difference in the value of the mean automobile loan debt for sailors who file bankruptcy in Jacksonville and San Diego.

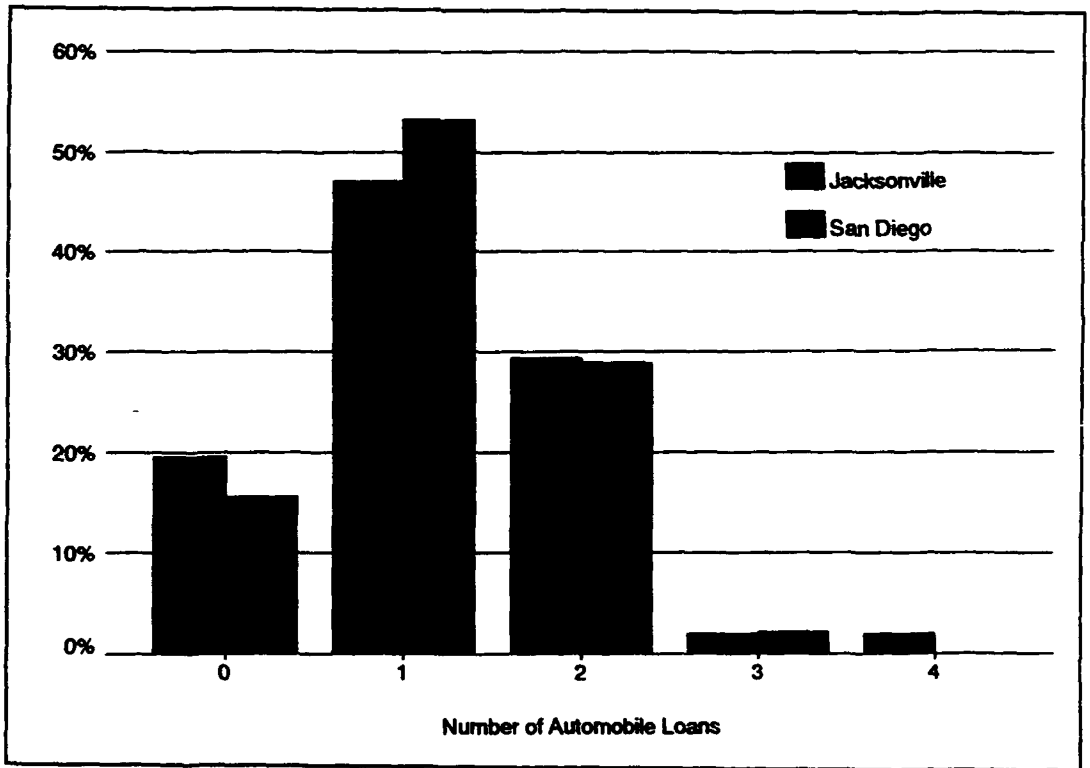

Figure 7 Frequency Distribution of the Number of Automobile Loans of Sailors Who File Bankruptcy

The 1988 San Diego bankruptcy study reported that the adjusted mean automobile loan debt for a military member was $12,089 and that 80 percent of the military debtors in the sample had at least one automobile loan [Ref. 7:p. 24]. The researcher's Jacksonville and San Diego samples revealed that 84.4 and 80.4 percent of the sailors in the sample had at least one automobile loan. The data tends to indicate that there is very little difference between the samples.

An interesting result was obtained when the mean value of automobile loans was compared to the mean value of total debt less mortgage debt. The 1988 San Diego bankruptcy study resulted in an adjusted value of approximately 50 percent for this ratio [Ref. 7:pp. 22,24]. The ratios obtained for the researcher's Jacksonville and San Diego samples were 33.5 and 36.7 percent. Given that the mean automobile loan has not changed much between 1988 and 1991, this tends to indicate that the amount of other types of debt has substantially increased from 1988 to 1991. This assertion will be investigated later in this Chapter.

4. Source of Automobile Loans

The variable SAUTOLN was used to record the source of a debtor's automobile loan in the 96 active duty Navy bankruptcy cases sampled. The data was grouped into four categories, Navy Federal Credit Union (NFCU), automobile dealer, other bank, and other. No statistical tests were done on this data.

Figure 8 provides the results of the frequency analysis conducted on the financing source of automobile loans

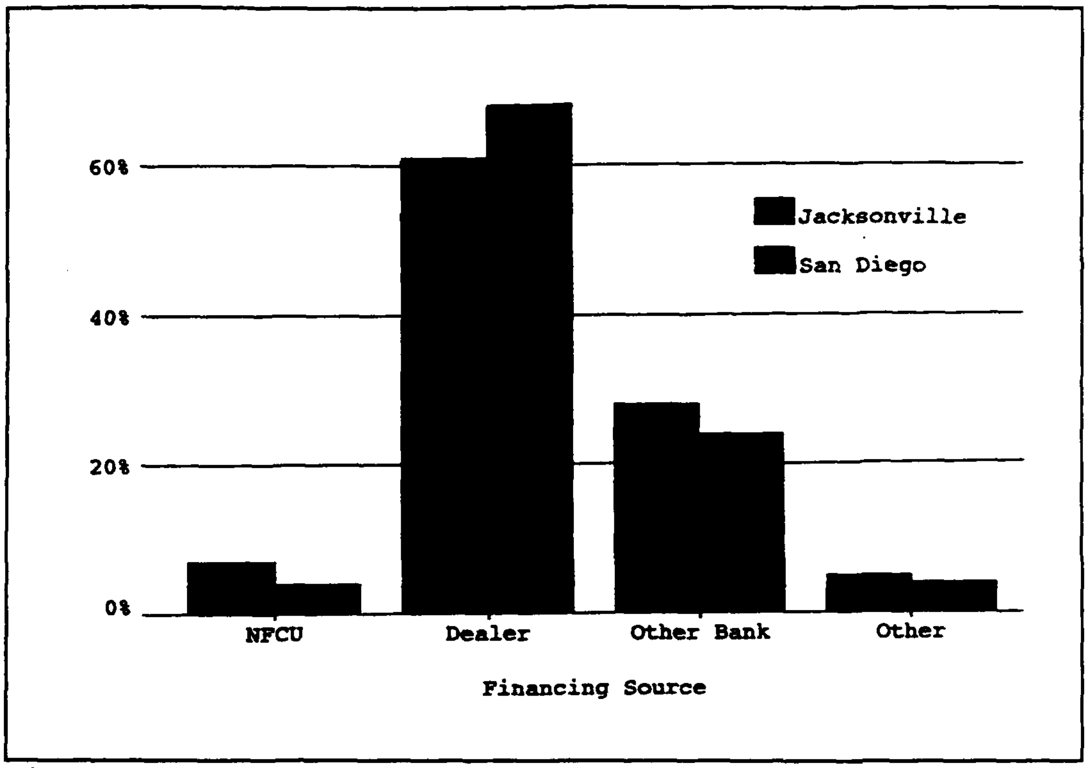

Figure 8 Frequency Distribution of the Financing Source of Automobile Loans for Sailors Who File Bankruptcy

debtors listed in their petitions. The results for the two sample groups are nearly identical. The researcher felt that it was surprising that NFCU was used so little to finance automobiles. His personal experience with NFCU is that they can usually offer a lower interest rate to finance an automobile than an automobile dealer. Possible explanations for this are that the debtors are already in financial difficulty when they purchase an automobile and are turned down by NFCU for a loan, or that the debtors are less sophisticated and more impulsive in this type of financial transaction. As a result, they finance their automobiles through the dealer.

5. Total Secured Debt

The variable TOTLNW was used to record the total secured debt listed in the 96 active duty Navy bankruptcy cases sampled. The value includes mortgage debt.

a. Jacksonville

The mean total secured debt listed was $38,487, the median was $26,070, and the standard deviation was $32,730. The maximum total secured debt listed by a sailor was $95,350. The reader is reminded that 47 percent of the sample were homeowners who had a mean mortgage value of $54,551. The researcher is 95 percent confident that the mean total secured debt of all sailors who file bankruptcy in Jacksonville is between $29,282 and $47,692.

b. San Diego

The mean total secured debt listed was $22,069, the median was $12,250, and the standard deviation was $26,849. The maximum total secured debt listed by a sailor was $135,170. The reader is reminded that only 15.6 percent of the sample were homeowners who had a mean mortgage value of $54,903. The researcher is 95 percent confident that the mean total secured debt of all sailors who file bankruptcy in San Diego is between $14,003 and $30,135.

c. Comparison and Discussion

The data provides evidence that the mean total secured debt for sailors who file bankruptcy in Jacksonville is greater than for sailors who file bankruptcy in San Diego. This is not a surprising result, since more debtors own houses in the Jacksonville area than in the San Diego area.

6. Total Secured Debt Less Mortgage Debt

The variable TOTLNWO was used to record the total secured debt less mortgage debt listed in the 96 active duty Navy bankruptcy cases sampled. The researcher feels this variable is a better measure to compare debtors with, since it removes the bias associated with large mortgage debt and looks primarily at secured consumer debt.

a. Jacksonville

The mean total secured debt less mortgage debt was \$14,599, the median was \$10,600, and the standard deviation was \$16,447. The maximum total secured debt less mortgage debt listed by a sailor was \$86,940. This number includes \$82,320 of automobile leases. The researcher is 95 percent confident that the mean total secured debt less mortgage debt of all sailors who file bankruptcy in Jacksonville is between \$9,973 and \$19,224.

b. San Diego

The mean total secured debt less mortgage debt was \$12,442, the median was \$11,000, and the standard deviation was \$9,222. The maximum total secured debt less mortgage debt listed by a sailor was \$38,560. The researcher is 95 percent confident that the mean total secured debt less mortgage debt of all sailors who file bankruptcy in San Diego is between $9,672 and $15,213.

c. *Comparison and Discussion*

The data does not provide evidence that the mean total secured debt less mortgage debt for sailors who file bankruptcy in Jacksonville is different from sailors who file bankruptcy in San Diego. The adjusted mean total secured debt less mortgage debt in the 1988 San Diego bankruptcy study was $13,815 [Ref. 7:pp. 22,24]. The study did not provide enough information to conduct a comparison with the researcher's data. The adjusted mean total secured debt less mortgage debt in the 1981 Consumer Bankruptcy Project was $15,256 [Ref. 6:pp. 64,69,284].

Comparing 1991 results with 1981 results must be approached cautiously. It assumes that debtors' spending habits and credit conditions are the same in 1981 as in 1991. However, this is not necessarily true as the 1980s witnessed a large increase in credit card use. Some of this use was to purchase items which would have been bought under a secured loan arrangement, but since they were purchased with credit cards are treated as unsecured debt. Having said this, the researcher does not feel that the two studies can be used to make a meaningful comparison of the variable secured debt less mortgage debt.

The above assertion is supported by calculating the percentage of automobile debt to total secured debt less mortgage debt for the researcher's two sample groups. The value for Jacksonville is 85 percent and for San Diego it is 92 percent. The adjusted value obtained from the 1981 Consumer Bankruptcy Project is 50 percent [Ref. 6:pp. 64,69,284]. This shows how the large increase in credit card use in the 1980s has resulted in a decrease in the use of secured credit and an increase in the use of unsecured credit.

E. UNSECURED DEBT

This section presents the results of the two main categories of unsecured debt which were identified in the 96 active duty Navy bankruptcy cases sampled. These categories are credit card debt and signature loan debt. The majority of the results will not be discussed until the end of the presentation of all the data gathered on credit card debt.

1. Bank Credit Card Debt

The variables NBNKCD and BNKCDDT were used to record the number of bank credit cards and the total value of bank credit card debt listed in the 96 active duty Navy bankruptcy cases sampled. Bank credit cards were defined for the purpose of the study as Visa, Mastercard, American Express, and other credit cards issued by banks. It does not include Discover or Diner's Club credit cards. These credit cards were recorded for the variable Other Credit Card Debt.

a. Jacksonville

Figure 9 provides the results of the frequency analysis conducted on the number of bank credit cards listed by the debtors. The mean number of bank credit cards for the 41 debtors who listed them was 3.1, the median was 2.0, and the standard deviation was 2.4. The researcher is 95 percent confident that the mean number of bank credit cards for all sailors who file bankruptcy and have bank credit cards is between 2.3 and 3.8. The maximum number of bank credit cards listed was 12, and over 80 percent of the debtors listed at least one bank credit card.

The mean value of bank credit card debt for the 41 debtors who listed it was $6,388, the median was $3,700, and the standard deviation was $7,641. The researcher is 95 percent confident that the mean value of bank credit card debt for all sailors who file bankruptcy and have bank credit cards is between $3,976 and $8,800. The maximum value of bank credit card debt listed was $34,140.

b. San Diego

Figure 9 provides the results of the frequency analysis conducted on the number of bank credit cards listed by the debtors. The mean number of bank credit cards for the 40 debtors who listed them was 3.1, the median was 3.0, and the standard deviation was 2.0. The researcher is 95 percent confident that the mean number of bank credit cards for all

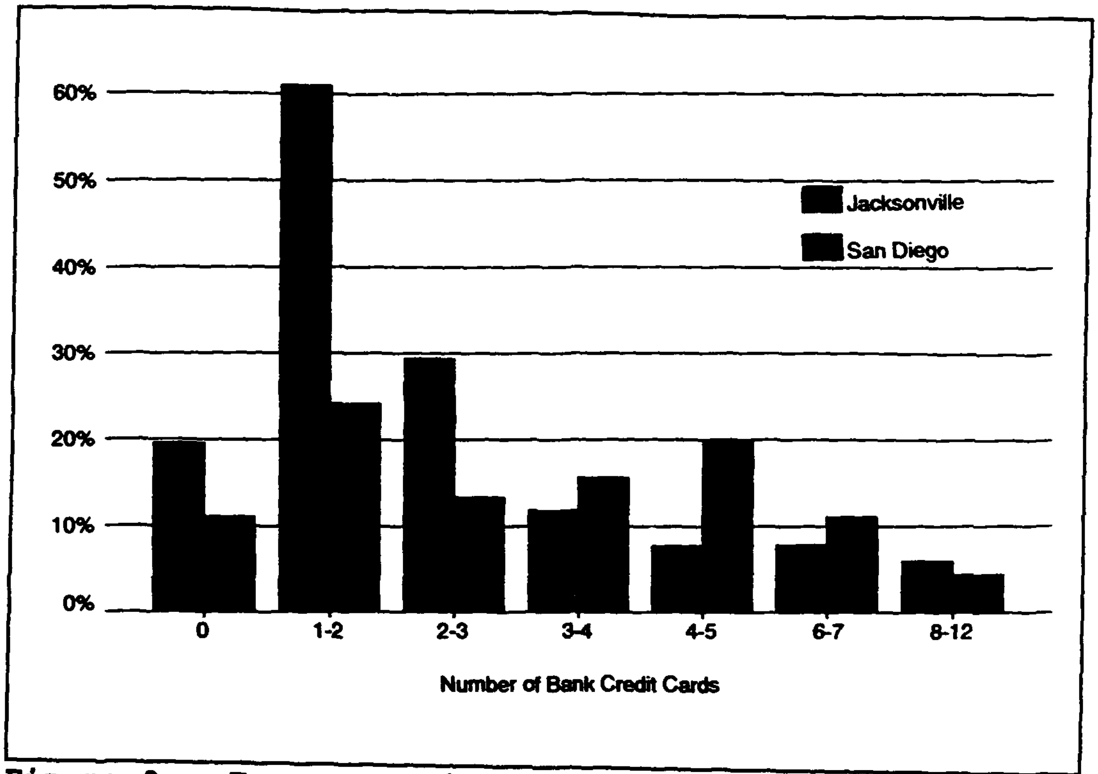

Figure 9 Frequency Distribution of the Number of Bank Credit Cards Held by Sailors Who File Bankruptcy

sailors who file bankruptcy and have bank credit cards is between 2.3 and 3.7. The maximum number of bank credit cards listed was 9 and over 88 percent of the debtors listed at least one bank credit card.

The mean value of bank credit card debt for the 40 debtors who listed it was $6,430, the median was $5,315, and the standard deviation was $6,006. The researcher is 95 percent confident that the mean value of bank credit card debt for all sailors who file bankruptcy and have bank credit cards is between $4,509 and $8,351. The maximum value of bank credit card debt listed was $28,670.

c. Comparison and Discussion

The data does not provide evidence that the mean number of bank credit cards, or the mean value of bank credit card debt for all duty Navy bankruptcies is different for Jacksonville and San Diego. The data would tend to indicate that there is little difference between the use of bank credit cards by sailors who file bankruptcy in Jacksonville and San Diego.

2. Department Store Credit Card Debt

The variables NDEPTCD and DEPTDT were used to record the number of department store credit cards and the total value of department store credit card debt listed in the 96 active duty Navy bankruptcy cases sampled. Department store credit card debt was defined for the purpose of the study as debt incurred from department stores that issue their own credit cards and merchants who sell on credit without using a credit card. It does not include the specialized categories of debt such as gasoline companies, auto repairs, medical debt, and so forth.

a. Jacksonville

Figure 10 provides the results of the frequency analysis conducted on the number of department store credit cards listed by the debtors. The mean number of department store credit cards for the 42 debtors who listed them was 3.4, the median was 3.0, and the standard deviation was 2.3. The

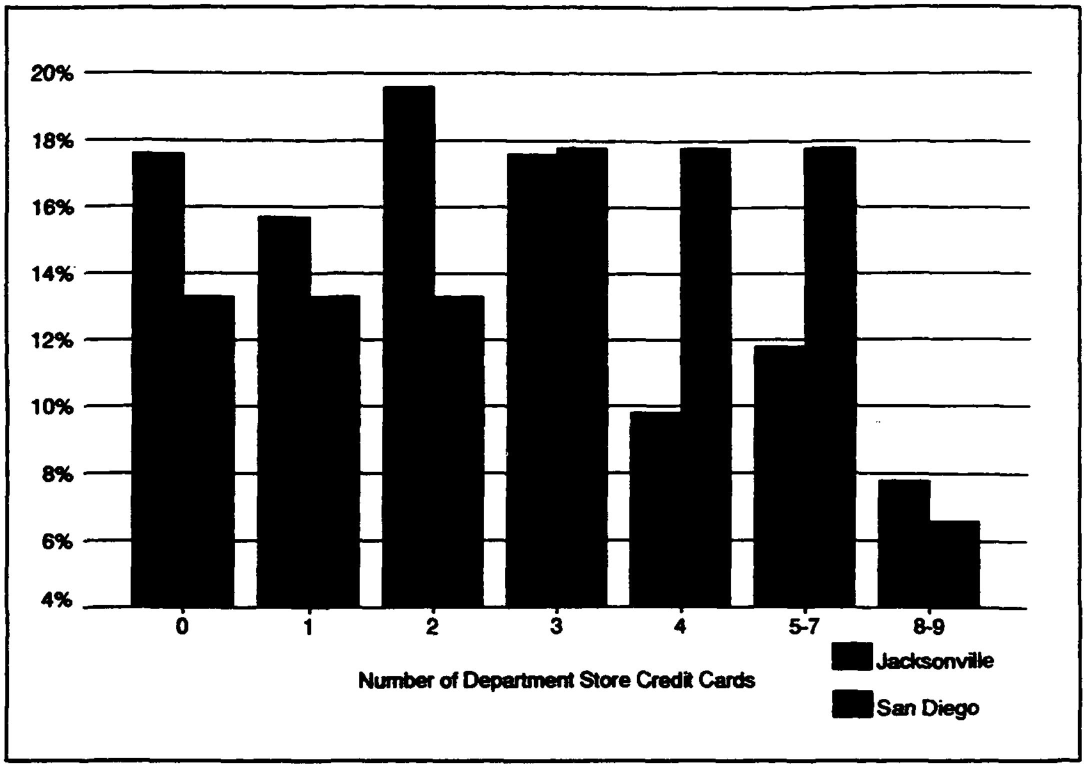

Figure 10 Frequency Distribution of the Number of Department Store Credit Cards Held by Sailors Who File Bankruptcy

researcher is 95 percent confident that the mean number of department store credit cards for all sailors who file bankruptcy and have department store credit cards is between 2.7 and 4.1. The maximum number of department store credit cards listed was nine, and over 82 percent of the debtors listed at least one department store credit card.

The mean value of department store credit card debt for the 42 debtors who listed it was $3,608, the median was $2,370, and the standard deviation was $3,281. The researcher is 95 percent confident that the mean value of department store credit card debt for all sailors who file bankruptcy and have department store credit card debt is between $2,586 and $4,630. The maximum value of department store credit card debt listed was $13,680.

b. San Diego

Figure 10 provides the results of the frequency analysis conducted on the number of department store credit cards listed by the debtors. The mean number of department store credit cards for the 39 debtors who listed them was 3.8, the median was 3.0, and the standard deviation was 2.2. The researcher is 95 percent confident that the mean number of department store credit cards for all sailors who file bankruptcy and have department store credit cards is between 3.1 and 4.5. The maximum number of department store credit cards listed was nine and over 84 percent of the debtors listed at least one department store credit card.

The mean value of department store credit card debt for the 39 debtors who listed it was $3,298, the median was $2,310, and the standard deviation was $2,875. The researcher is 95 percent confident that the mean value of department store credit card debt for all sailors who file bankruptcy and have department store credit card debt is between $2,350 and $4,215. The maximum value of department store credit card debt listed was $12,350.

c. Comparison and Discussion

The data does not provide evidence that the mean number of department store credit cards, or the mean value of department store credit card debt for all active duty Navy bankruptcies is different for sailors who file bankruptcy in Jacksonville and San Diego. The data tends to indicate that there is little difference between the use of department store credit cards by sailors who file bankruptcy in Jacksonville and San Diego.

3. Gasoline Credit Card Debt and Other Credit Card Debt

The variables NGASCD and GASCDDT were used to record the number of gasoline credit cards and the total value of gasoline credit card debt listed in the 96 active duty Navy bankruptcy cases sampled. The variables NOTHCD and OTHCDDT were used to record the number of other credit cards and the total value of other credit card debt listed in the 96 active duty Navy bankruptcy cases sampled. Other credit cards were defined for the purpose of the study as Discover cards and other credit cards not covered by the other three categories of credit cards. No significant analysis was done on these variables other than to include them with the analysis of total credit cards.

In the Jacksonville sample, 31 percent of the debtors had gasoline credit cards with a mean debt of $740. In the

San Diego sample, 18 percent of the debtors had gasoline credit cards with a mean debt of $277.

In the Jacksonville sample, 23 percent of the debtors had other credit cards with a mean debt of $2,320. In the San Diego sample, 22 percent of the debtors had other credit cards with a mean debt of $1,812.

4. Total Credit Card Debt

The variables NTOTCD and TOTCDDT were used to record the number of total credit cards and the total amount of credit card debt listed in the 96 active duty Navy bankruptcy cases sampled. These variables are the summation of the four categories of credit cards previously discussed.

a. Jacksonville

Figure 11 provides the results of the frequency analysis conducted on the number of total credit cards listed by the debtors. The mean number of total credit cards listed by the 47 debtors who listed a credit card was 6.5, the median was 5.0, and the standard deviation was 4.3. The researcher is 95 percent confident that the mean number of total credit cards for all sailors who file bankruptcy and have credit cards is between 5.2 and 7.7. The maximum number of credit cards listed was 17.

The mean value of total credit card debt for the 47 debtors who listed it was $9,612, the median was $6,320, and the standard deviation was $9,090. The researcher is 95

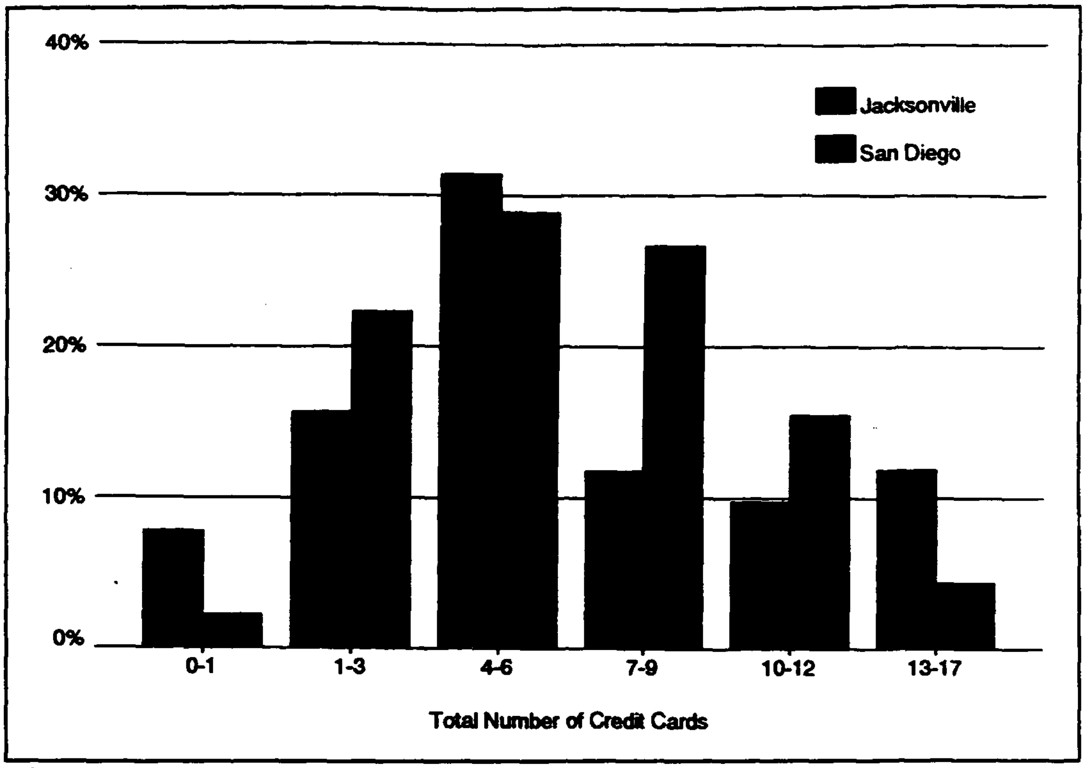

Figure 11 Frequency Distribution of the Total Number of Credit Cards Held by Sailors Who File Bankruptcy

percent confident that the mean value of total credit card debt for all sailors who file bankruptcy and have credit cards is between $6,944 and $12,282. The maximum amount of total credit card debt listed was $37,050.

b. San Diego

Figure 11 provides the results of the frequency analysis conducted on the number of total credit cards listed by the debtors. The mean number of total credit cards listed by the 44 debtors who listed a credit card was 6.7, the median was 6.0, and the standard deviation was 3.7. The researcher is 95 percent confident that the mean number of total credit cards for all sailors who file bankruptcy and have credit cards is between 5.6 and 7.8. The maximum number of credit cards listed was 17.

The mean value of total credit card debt for the 44 debtors who listed it was $9,217, the median was $7,460, and the standard deviation was $7,887. The researcher is 95 percent confident that the mean value of total credit card debt for all sailors who file bankruptcy and have credit cards is between $6,819 and $11,615. The maximum amount of total credit card debt listed was $37,430.

c. Comparison and Discussion

The data does not provide evidence that the mean number of total credit cards, or the mean value of total credit card debt for all active duty Navy bankruptcies is different for sailors in Jacksonville and San Diego. The data tends to indicate that there is little difference between the use of credit cards by sailors who file bankruptcy in Jacksonville and San Diego.

The ratio of total credit card debt to total debt less mortgage debt was calculated for the researcher's two samples. In Jacksonville, the mean for this ratio was .33, the median was .27, and the standard deviation was .23. In San Diego, the mean for this ratio was .36, the median was .30, and the standard deviation was .23. This data indicates that credit card debt accounts for about one-third of a debtor's total debt less mortgage debt. The 1988 San Diego bankruptcy study estimated that the ratio of total credit card debt to total debt less mortgage debt was .25 [Ref. 7:pp. 22,28]. The study also determined the adjusted mean total credit card debt to be $5,842 for sailors who filed bankruptcy in the sample [Ref. 7:p. 28]. This data tends to indicate that the amount of total credit card debt of sailors who filed bankruptcy in the San Diego area went up between 1988 and 1991.

In order to compare the researcher's data with the 1981 Consumer Bankruptcy Project, the researcher's data was coded into a category called all-purpose credit card debt. This category is defined as the sum of bank credit card debt and other credit card debt. In the Jacksonville sample, the mean value for all-purpose credit card debt was $6,845, the median was $4,345, and the standard deviation was $8,130. In the researcher's San Diego sample, the mean for all-purpose credit card debt was $6,883, the median was $5,615, and the standard deviation was $6,208. The 1981 Consumer Bankruptcy Project determined that the adjusted mean for all-purpose credit card debt was $3,011 [Ref. 6:p. 183]. The data provides evidence that the mean all-purpose credit card debt for Jacksonville and San Diego sailors who file bankruptcy is greater than the adjusted mean all-purpose credit card debt for the 1981 Consumer Bankruptcy Project. As mentioned earlier, this result is partially attributable to the large increase in credit card use in the 1980s.

As a final comparison, the researcher's results will be compared with data obtained for the entire population. In 1990, the mean value of bank credit card debt for the 207 million bank credit cards in circulation was $1,300 [Ref. 25:p. 205]. This number is substantially less than the results obtained from the researcher's two samples.

In 1992, a survey of 715 people was conducted to determine consumer attitudes toward credit cards. It determined that 25 percent of the population has five or more credit cards [Ref. 26:p. 1]. In the researcher's Jacksonville sample, 53 percent of the debtors had five or more credit cards; and in the researcher's San Diego sample, 69 percent of the debtors had five or more credit cards. The 1992 survey also determined that 18 percent of the people who have credit cards maintain a total outstanding credit card balance of greater than $1001 [Ref. 26:p. 11]. In the researcher's Jacksonville and San Diego samples, 91 and 86 percent of sailors who had credit cards maintained a total outstanding credit card balance greater than $1,001. This indicates that sailors who filed bankruptcy in Jacksonville and San Diego had on average more credit cards and maintained significantly larger credit card debt than the civilian population.

5. Signature Loan Debt

The variables SIGDT and SSIGDT were used to record the amount of signature loan debt and the source of signature loan debt in the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

Table X provides the results of the frequency analysis done on the creditors who provided signature loans to the debtors in the sample. The mean value of total signature loan debt for the 38 sailors who had signature loans was $4,405, the median was $2,980, and the standard deviation was $4,822. The researcher is 95 percent confident that the mean

TABLE X FREQUENCY ANALYSIS OF SAILORS WHO HAD SIGNATURE LOANS

	Percentage of Signature Loans Provided By				Percentage of Debtors Who Had __ Signature Loans		
Location	**NFCU**	**Bank**	**Finance Company**	**Other**	**One**	**Two**	**Three**
Jacksonville	4.5	23.9	67.2	4.5	74.5	37.7	19.6
San Diego	10.2	16.3	69.4	4.1	66.7	31.1	8.8

signature loan debt for all sailors who file bankruptcy and have signature loans is between $2,490 and $5,074. The maximum amount of signature loan debt listed was $27,280.

b. San Diego

Table X provides the results of the frequency analysis done on the creditors who provided signature loans to the debtors in the sample. The mean value of total signature loan debt for the 30 sailors who had signature loans was $3,782, the median was $2,910, and the standard deviation was $3,461. The researcher is 95 percent confident that the mean signature loan debt for all sailors who file bankruptcy and have signature loans is between $2,819 and $5,990. The maximum amount of signature loan debt listed was $15,840.

c. Comparison and Discussion

The data does not provide evidence that the mean signature loan debt for active duty Navy bankruptcies is *different* between Jacksonville and San Diego. Table X indicates that almost 70 percent of the signature loans listed by sailors in the researcher's samples were obtained through finance companies. This fact in combination with the low percentage of sailors who obtained signature loans from NFCU would tend to indicate that the sailors were already experiencing severe financial hardships when they obtained signature loans.

In the 1988 San Diego bankruptcy study, 74 percent of their sample had signature loans, and the adjusted mean value of signature loan debt was $1,442 [Ref. 7:p. 22]. The percentage of debtors in their sample who obtained a signature loan from a finance company was 49 percent [Ref. 7:p. 22]. The mean signature loan debt for the researcher's samples were considerably larger than $1,442. This tends to indicate that the use of signature loans by sailors who filed bankruptcy in San Diego increased from 1988 to 1991.

The banking industry views signature loans obtained from finance companies as an impending sign of financial difficulties. They are seen as lenders of last resort and people who borrow money from them usually have exhausted all their other available resources [Ref. 27:p. 11]. Finance companies charge very high interest rates and usually tack on extra items such as debtor loan insurance to the amount of money being borrowed. The following is a partial list of the finance companies and the interest rates they charged sailors in the researcher's two samples. (Each percentage represents the interest rate charged on one loan.)

- ITT Financial: 27.4%, 22.3%, 21.4%
- AVCO Financial: 29.2%, 23.1%, 27.0%
- Commercial Credit: 28.0%
- American General Finance: 28.6%, 25.1%
- Beneficial Finance: 24.9%
- Great Western Financial Services: 23.2%
- Mercury Finance: unknown
- Northwestern Finance: 29.4%

6. Repossessions

The variables REPFOR and REPODT were used to record the number of sailors who had personal property repossessed or foreclosed on and the amount of repossession debt listed in the 96 active duty Navy bankruptcy cases sampled. The outstanding loan value associated with the item repossessed or foreclosed on was recorded for the value of REPODT.

a. Jacksonville

In Jacksonville, 33.3 percent of the debtors in the sample had one or more items repossessed or foreclosed on. The mean value of repossession and foreclosure debt for the 14 sailors who had an item repossessed or foreclosed on was $10,204, the median was $8,580, and the standard deviation was $7,914. The maximum value listed was $25,360.

b. San Diego

In San Diego, 15.6 percent of the debtors in the sample had one or more items repossessed or foreclosed on. The mean value of repossession and foreclosure debt for the 7 sailors who had an item repossessed or foreclosed on was $7,380, the median was $7,000, and the standard deviation was $4,100. The maximum value listed was $15,280.

c. Comparison and Discussion

The large majority of repossession and foreclosure debt was for automobiles. There was only one debtor in the 96 active duty Navy bankruptcy cases sampled who had a house foreclosed on. He was indebted to the Veterans Administration. The data tends to indicate that creditors in the Jacksonville area are more aggressive in pursuing delinquent accounts than in the San Diego area.

7. Total Unsecured Debt

The variable TOTUNSDT was used to record the amount of total unsecured debt listed in the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

All 51 sailors in the Jacksonville sample had some amount of unsecured debt. The mean value of total unsecured debt was $16,406, the median was $12,240, and the standard deviation was $10,971. The researcher is 95 percent confident that the mean total secured debt for all sailors who file bankruptcy in the Jacksonville area is between $13,321 and $19,491. The maximum total unsecured debt listed was $46,100 and the minimum was $3,690.

b. San Diego

All 45 sailors in the San Diego sample had some amount of unsecured debt. The mean value of total unsecured debt was $14,049, the median was $12,980, and the standard deviation was $9,650. The researcher is 95 percent confident that the mean total secured debt for all sailors who file bankruptcy in the San Diego area is between $11,150 and

$16,948. The maximum total unsecured debt listed was $46,200 and the minimum was $900.

c. Comparison and Discussion

The data does not provide evidence that the mean total unsecured debt for sailors who file bankruptcy in Jacksonville is different from sailors who file bankruptcy in San Diego. The data tends to indicate that there is little difference between the amount of total unsecured debt of sailors who file bankruptcy in Jacksonville and San Diego.

The 1988 San Diego bankruptcy study determined that the adjusted mean total unsecured debt was $13,183 [Ref. 7:p. 27]. This tends to indicate that there is little difference in the amount of total unsecured debt of sailors who filed bankruptcy in San Diego in 1988 and 1991. The 1981 Consumer Bankruptcy Project reported that the adjusted mean total unsecured debt was $23,221 and the median was $10,566. In addition, it reported great variation in the data. [Ref. 6:p. 64] The researcher does not feel confident using the 1981 Consumer Bankruptcy Project's total unsecured debt data to make comparisons with.

F. TOTAL LIABILITIES

This section presents the results of the analysis conducted on the summation of all debt listed in the 96 active duty Navy bankruptcy cases sampled. Both total liabilities and total liabilities less mortgage debt are analyzed. The data analyzed in this section is used later in this Chapter to calculate debt-to-income ratios.

1. Total Liabilities

The variable LIABW was used to record the amount of total liabilities, including mortgage debt, listed in the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

The mean value for total liabilities was $53,487, the median was $45,600, and the standard deviation was $33,317. The researcher is 95 percent confident that the mean value of total liabilities for all sailors who file bankruptcy in the Jacksonville area is between $44,117 and $62,858. The minimum value listed was $8,520 and the maximum was $130,900.

b. San Diego

The mean value for total liabilities was $36,110, the median was $26,740, and the standard deviation was $27,400. The researcher is 95 percent confident that the mean value of total liabilities for all sailors who file bankruptcy in the San Diego area is between $27,878 and $44,342. The minimum value listed was $900 and the maximum was $137,480.

c. Comparison and Discussion

The data provides evidence that the mean value of total liabilities for sailors who file bankruptcy in Jacksonville is greater than for sailors who file bankruptcy in San Diego. This is not surprising and is due to the large difference between the number of sailors who own houses in Jacksonville and San Diego.

The 1988 San Diego bankruptcy study reported that the adjusted mean total liabilities was $30,222 [Ref. 7:p. 22]. The 1981 Consumer Bankruptcy Project reported that the mean adjusted total liabilities was $57,835 [Ref. 6:p. 64]. The percentage of homeowners between the 1981 Consumer Bankruptcy Project and the researcher's Jacksonville sample is similar. This tends to indicate there is little difference between the mean total liabilities of sailors who file bankruptcy in Jacksonville and the civilian population. The data does not provide evidence contrary to this assertion.

2. Total Liabilities Without Mortgage Debt

The variable LIABWO was used to record the amount of total liabilities less mortgage debt for the 96 active duty Navy bankruptcy cases sampled.

a. Jacksonville

The mean value of total liabilities less mortgage debt for the Jacksonville sample was $29,895, the median was $25,440, and the standard deviation was $23,329. The researcher is 95 percent confident that the mean value of total liabilities less mortgage debt for all sailors who file bankruptcy in Jacksonville is between $23,334 and $36,456. The minimum value listed was $5,000 and the maximum was $127,770.

b. San Diego

The mean value of total liabilities less mortgage debt for the San Diego sample was $26,481, the median was $22,390, and the standard deviation was $14,967. The researcher is 95 percent confident that the mean value of total liabilities less mortgage debt for all sailors who file bankruptcy in San Diego is between $21,984 and $30,977. The minimum value listed was $900 and the maximum was $70,870.

c. Comparison and Discussion

The data does not provide evidence that the mean value of total liabilities less mortgage debt for sailors who file bankruptcy in Jacksonville is different from sailors who file bankruptcy in San Diego. The 1988 San Diego bankruptcy study determined that the adjusted mean value of total liabilities less mortgage debt was $23,314 [Ref. 7:p. 22]. This tends to indicate that there is little difference between the value of mean total liabilities less mortgage debt of sailors who filed bankruptcy in San Diego 1988 and 1991. The researcher was unable to obtain a comparison figure from the 1981 Consumer Bankruptcy Project.

From the data presented thus far, it appears that the higher cost of living associated with the San Diego area as compared to the Jacksonville area is not a contributing factor to the amount of debt a sailor has when he files bankruptcy. The next logical step is to compare the debtors' income and expenses to see if the higher cost of living in San Diego has an effect on the amount of money left over after paying essential living expenses. This extra money is called excess income by the researcher and is the amount of money that a debtor has available to repay debt. The next two sections look at the debtors' expenses and income.

G. EXPENSES

This section presents the results from the analysis conducted on the expenses listed by the debtors in their bankruptcy petitions.

1. Government Quarters

The variable GOVQTR was used to record whether or not the sailors who filed bankruptcy in the researcher's samples lived in some type of government housing. The information for this variable was obtained from the Active Duty Military Pay Files (JUMPS) provided by the Defense Manpower Data Center (DMDC). The researcher assumed that if the JUMPS files did not list a value for BAQ and VHA for the debtor, then the debtor lived in government housing. The results obtained from the JUMPS data were almost identical to the results inferred from the bankruptcy petitions. The researcher is confident the data is accurate.

a. Jacksonville

Of the 51 active duty Navy bankruptcy cases sampled, 9.8 percent lived in government quarters. The reader is reminded that 47.1 percent of the debtors in the sample owned houses. Of the remaining 27 debtors, only 18.5 percent lived in government quarters.

b. San Diego

Of the 45 active duty Navy bankruptcy cases sampled, 28.9 percent lived in government quarters. Only 6.6 percent of the debtors in the sample were living in houses they owned.

c. Comparison and Discussion

The data provide evidence that the percentage of sailors who file bankruptcy and live in government quarters in San Diego is greater than the percentage in Jacksonville. No other data was available to the researcher for comparisons.

2. Rent and Mortgage Expense

The variables RENTEXP and MORTEXP were used to record the value of either rent expense or mortgage expense listed in the 96 active duty Navy bankruptcy cases sampled. For debtors who lived in government housing, the researcher used the value of BAQ and VHA they would have received if they did not live in government quarters for the value of rent expense. The actual values of rent expense for the debtors who did not live in government housing were also analyzed. The mean value for actual rent expense for the two samples did not differ by more than $13 from the value obtained using BAQ and VHA to record rent expense for the debtors who lived in government quarters.

As a result, the researcher feels his method of recording rent expense is acceptable and has no adverse effect on the results.

a. Jacksonville

The mean value of rent expense for the Jacksonville sample was $478, the median was $490, and the standard deviation was $114. The minimum value listed was $200 and the maximum was $670.

The mean value for mortgage expense for the Jacksonville sample was $597, the median was $600, and the standard deviation was $138. The researcher is 95 percent confident that the mean mortgage expense for all sailors who file bankruptcy in Jacksonville is between $538 and $655. The minimum value listed was $310 and the maximum was $920. The data provides evidence that the mean value of mortgage expense is greater than the mean value of rent expense for sailors who file bankruptcy in Jacksonville.

b. San Diego

The mean value of rent expense for the San Diego sample was $591, the median was $570, and the standard deviation was $186. The minimum value listed was $290 and the maximum was $1,500.

The reader is cautioned that the following results were obtained from a sample of seven homeowners and only three of these houses were located in the San Diego area. The mean value for mortgage expense for the San Diego sample was $660, the median was $580, and the standard deviation was $487. The minimum value listed was $260 and the maximum was $1,720.

c. Comparison and Discussion

The data provides evidence that the mean rent expense for sailors who file bankruptcy in San Diego is greater than Jacksonville. The researcher is 95 percent confident that the difference between mean rent expense is between $39 and $187. However, this difference is compensated for in the sailor's income by a higher VHA rate in San Diego. The method used to record rent expense was necessitated in order to provide the cases sampled a standard reference from which to analyze the debtors' income and excess income. This variable is discussed later in this Chapter.

3. **Total Monthly Expenses**

The variable TMONEXP was used to record the value of total monthly expenses, including mortgage or rent expense, but not including other debt payments, listed in the 96 active duty Navy bankruptcy cases sampled. Debtors who lived in government housing were treated as discussed in the preceding section. The expenses recorded in the bankruptcy petition are from the debtor's estimated budget and are somewhat subjective.

a. Jacksonville

For the 49 debtors for which total monthly expenses could be determined, the mean value was $1,639, the median was $1,690, and the standard deviation was $396. The researcher is 95 percent confident that the mean value of total expenses for all sailors who file bankruptcy in Jacksonville is between $1,526 and $1,752. The minimum value listed was $830 and the maximum was $2,400.

b. San Diego

For the 43 debtors for which total monthly expenses could be determined, the mean value was $1,757, the median was $1,780, and the standard deviation was $625. The researcher is 95 percent confident that the mean value of total expenses for all sailors who file bankruptcy in San Diego is between $1,565 and $1,950. The minimum value listed was $940 and the maximum was $3,850.

c. Comparison and Discussion

The data does not provide evidence that there is a difference between the mean total monthly expenses for sailors who file bankruptcy in Jacksonville and sailors who file bankruptcy in San Diego. This tends to indicate that the higher cost of living in the San Diego area is not a contributing factor to the higher percentage of active duty Navy bankruptcy cases filed in San Diego as compared to Jacksonville.

H. INCOME

This section presents the results from the analysis conducted on the income provided by DMDC and listed by the debtors for the 96 active duty Navy bankruptcy cases sampled.

1. Spouse Employment

The variable SPEMP was used to record for the 96 active duty Navy bankruptcy cases sampled whether or not the sailors' spouses were employed at the time of filing bankruptcy.

a. Jacksonville

Of the 42 married sailors in the Jacksonville sample, 42.8 percent had spouses who were employed. The researcher is 95 percent confident that the percentage of all sailors who were married with working spouses and filed bankruptcy in Jacksonville is between 27.9 and 57.8 percent.

b. San Diego

Of the 28 married sailors in the San Diego sample, 50 percent had spouses who were employed. The researcher is 95 percent confident that the percentage of all sailors who were married with working spouses and filed bankruptcy in Jacksonville is between 31.5 and 68.5 percent.

c. Comparison and Discussion

The data does not provide evidence that there is a difference between the percentage of married sailors who have working spouses and file bankruptcy in the Jacksonville and San Diego areas.

2. Sailor's Monthly Income

The variable PDMONINC was used to record the gross monthly income of the 96 sailors in the researcher's samples. This variable does not take into consideration other sources of income, such as from spouse employment. As discussed in Chapter IV, the researcher did not feel that the income data reported in the bankruptcy petitions were accurate enough to be analyzed. This problem was overcome by using information obtained from the JUMPS pay file provided by DMDC. The researcher is confident that the income data used for the analysis is accurate. In order to compare debtors in the two samples, the debtors living in government housing had their incomes adjusted by the BAQ and VHA they would have received had they not been living in government housing.

a. Jacksonville

Of the 50 cases for which income information was available, the mean monthly income was $2,234, the median was $2,205, and the standard deviation was $544. The researcher is 95 percent confident that the mean monthly income of all sailors who file bankruptcy in the Jacksonville area is between $2,079 and $2,388. The maximum income listed was $4,800 and the minimum was $1,380.

b. San Diego

The mean debtor's monthly income was $2,128, the median was $2,020, and the standard deviation was $508. The researcher is 95 percent confident that the mean monthly income of all sailors who file bankruptcy in the San Diego area is between $1,976 and $2,281. The maximum income listed was $4,280 and the minimum was $1,250.

c. Comparison and Discussion

The data does not provide evidence that the mean monthly income for all sailors who file bankruptcy in Jacksonville is different from sailors who file bankruptcy in San Diego. The 1988 San Diego bankruptcy study does not provide reliable information with which to make comparisons with.

3. Total Monthly Income

The variable TMONINC was used to record the total gross monthly income reported in the 96 active duty Navy bankruptcy cases sampled. This variable records all sources of income that were listed in the bankruptcy petitions sampled. The data recorded was adjusted, if necessary, as discussed in the previous section.

a. Jacksonville

For the 50 cases for which information was available, the mean total monthly income was $2,550, the median was $2,370, and the standard deviation was $749. The researcher is 95 percent confident that the mean total monthly income of all sailors who file bankruptcy in Jacksonville is between $2,357 and $2,763. The maximum value listed was $4,800 and the minimum was $1,380.

b. San Diego

The mean total monthly income was $2,440, the median was $2,370, and the standard deviation was $825. The researcher is 95 percent confident that the mean total monthly income of all sailors who file bankruptcy in San Diego is between $2,193 and $2,689. The maximum value listed was $5,680 and the minimum was $1,250.

c. Comparison and Discussion

The data does not provide evidence that the mean total monthly income for all sailors who file bankruptcy in Jacksonville is different from sailors who file bankruptcy in San Diego. The data tends to indicate there is little difference between the mean total monthly income for sailors who file bankruptcy in Jacksonville and San Diego. This is not surprising, given that rank, number of years of military service, and the percentage of married sailors who had working spouses indicated little differences between the two samples.

The 1981 Consumer Bankruptcy Project reported that the adjusted mean family income for debtor's in their sample was $2,123 and the standard deviation was $784 [Ref. 6:p. 92]. The data does provide evidence that the mean total income of all sailors who file bankruptcy in either Jacksonville or San Diego is greater than the mean adjusted family income in the civilian population. The reader is reminded that in making comparisons, the 1981 income data was adjusted using Consumer Price Indices. This may or may not have an impact on the results. Regardless, the results of the researcher's samples are that sailors who filed bankruptcy in the Jacksonville sample had on average $30,600 a year in income, and sailors who filed bankruptcy in the San Diego sample had on average $29,280 a year in income.

4. Excess Income

The variable EXCINC was used to calculate the difference between total monthly income and total monthly expenses reported in the 96 active duty Navy bankruptcy cases sampled. This variable is interpreted as the amount of money left over after paying essential living expenses, including rent or mortgage expense, from a debtor's total monthly income. Excess income is the amount of money that a debtor has available every month to repay the debt listed in their bankruptcy petitions (other than mortgage debt).

a. Jacksonville

Of the 48 active duty Navy bankruptcy cases for which excess income could be calculated, the mean excess income was $908, the median was $845, and the standard deviation was $570. The researcher is 95 percent confident that the mean excess income for all sailors who file bankruptcy in Jacksonville is between $741 and $1,073. The maximum value listed was $2,400 and the minimum was $310.

b. San Diego

Of the 43 active duty Navy bankruptcy cases for which excess income could be calculated, the mean excess income was $686, the median was $640, and the standard deviation was $386. The researcher is 95 percent confident that the mean excess income for all sailors who file bankruptcy in San Diego is between $567 and $806. The maximum value listed was $1,830 and the minimum was $30.

c. Comparison and Discussion

The data provides evidence that the mean excess income for all sailors who file bankruptcy in Jacksonville is greater than the mean excess income for all sailors who file bankruptcy in San Diego. This result was obtained even though the variables, total monthly expenses and total monthly income, when analyzed separately, provided insufficient evidence to conclude there were differences between the samples. The results possibly indicate that the higher cost of living in the San Diego area as compared to the Jacksonville area may have an impact on the number of sailors who file bankruptcy.

The results obtained from this variable are surprising, considering that only 5.9 percent of the active duty Navy bankruptcy cases filed in Jacksonville were Chapter 13 cases, but yet the mean excess income was $908. Chapter 13 bankruptcy is specifically designed for debtors who have a large enough excess income to repay some of their debt, such as the sailors who file bankruptcy in Jacksonville. The researcher has no explanation for this dichotomy. Sailors in the Jacksonville area are making the decision, for whatever reason, to walk away from their debt obligations when they appear to have the financial resources to repay at least part of it.

I. DEBT-TO-INCOME RATIO

The variable DTIWO was used to calculate the ratio of total debt less mortgage debt to total yearly income for the 96 active duty Navy bankruptcy cases sampled.

1. Debt-to-Income

a. Jacksonville

The mean for the 50 active duty Navy bankruptcy cases that debt-to-income ratios could be calculated for was .97, the median was .84, and the standard deviation was .56. The researcher is 95 percent confident that the mean debt-to-income ratio for all sailors who file bankruptcy in Jacksonville is between .81 and 1.13. The minimum value calculated was .26 and the maximum was 2.7.

b. San Diego

The mean for the 45 active duty Navy bankruptcy cases that debt-to-income ratios could be calculated for was .90, the median was .84, and the standard deviation was .39. The researcher is 95 percent confident that the mean debt-to-income ratio for all sailors who file bankruptcy in San Diego is between .78 and 1.02. The minimum value calculated was .04 and the maximum was 1.96.

c. Comparison and Discussion

The data does not provide evidence that the mean debt-to-income ratio for sailors who file bankruptcy in Jacksonville is different from sailors who file bankruptcy in San Diego.

The mean debt-to-income ratios calculated for the researcher's samples are significantly greater than the debt-to-income ratios that exist in the entire population. The Federal Reserve Bulletin reports that fewer than five percent of all people have a debt-to-income ratio greater than .20 [Ref. 19:p. 18]. In the researcher's Jacksonville and San Diego samples, 100 and 95.5 percent of the sailors who filed bankruptcy had debt-to-income ratios greater than .20.

The 1981 Consumer Bankruptcy Project reported that the mean debt-to-income ratio for their sample was 2.0 [Ref. 19:p. 18]. In the researcher's Jacksonville and San Diego samples, 7.8 and zero percent of the sailors who filed bankruptcy had debt-to-income ratios greater than 2.0. These comparisons would tend to indicate that sailors in Jacksonville and San Diego are filing bankruptcy with a much lower debt burden than the civilian population. It indicates, on average, that the financial condition of active duty Navy personnel when they file bankruptcy is greater than two times better than the financial condition of civilians when they file bankruptcy.

J. CONCLUSIONS

The bankruptcy process is a large melting pot in which many of societies problems end up. Gambling, compulsive spending, medical problems, unemployment, and divorce are just some of the problems which can start an individual on the road to bankruptcy. The bankruptcy petitions do not provide the reasons which precipitated an individual filing bankruptcy. They merely list a number of characteristics about a debtor's financial condition. It is these characteristics from which the researcher and reader must draw conclusions about how severe the Navy bankruptcy problem is in San Diego and Jacksonville.

Based upon the results of the analysis of the data obtained from the 96 active duty Navy bankruptcy cases and the comparison studies, it is the researcher's conclusion that sailors in Jacksonville and San Diego are filing bankruptcy more often than the civilian population. In addition, sailors are choosing to file bankruptcy with a significantly lower debt burden than civilians who file bankruptcy. The average sailor who filed bankruptcy in San Diego and Jacksonville was an E-5 or E-6 with a yearly income of approximately $29,000. The 1981 Consumer Bankruptcy Project reported that about two-thirds of all debtors in their sample suffered an income interruption during the two years prior to filing bankruptcy, and that 7 to 17 percent of bankruptcies were filed by people who were unemployed [Ref. 6:p. 86]. It is possible Navy debtors could have suffered an income interruption leading up to bankruptcy if their spouses lost jobs, but it is highly unlikely that the numbers are as large as two-thirds. These facts serve to further support the assertion that sailors in Jacksonville and San Diego file bankruptcy more than one would expect.

The data did not provide any definite answer as to why the bankruptcy filing rate in San Diego was larger than Jacksonville. As mentioned earlier, the researcher would not be surprised to find the amount of bankruptcy lawyer advertising targeted at sailors being greater in San Diego than Jacksonville. Another possible reason for the difference is that the Navy's Personal Financial Management Program in Jacksonville is more effective than in San Diego. Time constraints prevented the researcher from pursuing these items.

The researcher also cannot explain why the Chapter 13 bankruptcy filing rate is so low in Jacksonville. It is true that Chapter 7 bankruptcy allows a debtor to "walk away" from his debt obligations. It was designed for debtors who do not have the income to file Chapter 13. The average excess income of sailors who filed bankruptcy in Jacksonville was $908. They would appear to have sufficient income to file Chapter 13 and repay at least part of their debt. But, for whatever reason, they were allowed to file Chapter 7 bankruptcy and walk away from their financial obligations.

Finally, the results of the Jacksonville and San Diego samples are amazingly similar. This indicates that there is little difference between the financial condition of sailors who file bankruptcy in Jacksonville and San Diego.

VI. CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

A. INTRODUCTION

This thesis presents and analyzes the results from the systematic sampling of active duty Navy bankruptcy cases at the Jacksonville, Florida and San Diego, California bankruptcy courts. Over 2000 bankruptcy cases were sampled in order to identify the desired sample of approximately 100 active duty Navy bankruptcy cases. The thesis discusses over 60 variables which were analyzed for the sailors in the sample and, where appropriate, compares the researcher's results with other bankruptcy studies. In addition, the thesis describes the process involved in filing Chapter 7 or Chapter 13 bankruptcy and provides a detailed explanation of the methodology used to obtain the data.

B. ANSWERS TO RESEARCH QUESTIONS

The research question which guided this thesis was:

- Are the numbers of, and characteristics of personal bankruptcies filed by active duty Navy personnel different from those found in the civilian population?

Based upon the results of the analysis of the data obtained from the 96 active duty Navy bankruptcy cases sampled, the researcher concludes that sailors in Jacksonville and San Diego are filing bankruptcy more often than the civilian population. This is contrary to what one would expect, considering that sailors have a steady income, unlike many civilians who file bankruptcy. If one were to assume that individuals with steady incomes are less likely to file bankruptcy, then one would predict that the Navy bankruptcy filing rate should be lower than the civilian filing rate. However, the data does not support this assertion.

In addition to filing bankruptcy more often than the civilian population, sailors are choosing to file bankruptcy with a significantly lower debt burden than civilians who file bankruptcy. The average sailor who filed bankruptcy in San Diego and Jacksonville was an E-5 or E-6 with a yearly income of approximately $29,000 and total liabilities less mortgage debt of approximately $28,000. This translates into a debt-to-income ratio of approximately 1.0. In the civilian population, the average debt-to-income ratio for bankruptcies is approximately 2.0 [Ref. 19:p. 18]. Thus, the financial condition of a sailor who chooses to file bankruptcy is almost two times better than the financial condition of a civilian who files bankruptcy.

The data did not provide any definite answer as to why the bankruptcy filing rate in San Diego was greater than Jacksonville. Based upon the data obtained, it is the researcher's conclusion that the higher cost of living in San Diego, as compared to Jacksonville, is not a contributing factor to the higher bankruptcy filing rate in San Diego. In fact, if one ignores mortgage debt, the Jacksonville and San Diego sample results are amazingly similar. This indicates that there is little difference between the financial condition of sailors who file bankruptcy in Jacksonville and San Diego.

C. PURPOSE OF THESIS

The first purpose of this thesis was to provide the PFM Program Manager a profile of the average sailor who files bankruptcy in Jacksonville and San Diego. The results of the data analysis contained in Chapter V will assist the Program Manager in evaluating the PFM program and provide useful information which can be incorporated into fleetwide preventive training and counseling programs.

It is important to remember that bankruptcy is the final chapter in a sailor's financial problems; and for every sailor who makes that final leap into bankruptcy, there are many others with financial problems that have not progressed to the bankruptcy threshold. This study determined that about one percent of all sailors in Jacksonville and San Diego file bankruptcy. It is probably safe to say that many more than that are in financial trouble and some of them may be on the road to bankruptcy.

The second purpose of this study was to provide the PFM Program Manager a detailed explanation of the bankruptcy process. The researcher acknowledges that there will be sailors whose financial conditions are so bad that bankruptcy may be the only viable alternative for them. In this case, the PFM counselors assigned to assist the sailors should have a good working knowledge of the bankruptcy process. Chapters II and III of this thesis will assist the PFM program in training its financial counselors on the bankruptcy process.

The final purpose of this thesis was to develop a simple sampling methodology to obtain data about the characteristics of sailors who file bankruptcy. Chapter IV provides this sampling methodology. This process could be repeated at other bankruptcy courts to expand the researcher's data base and gain an even better understanding of how severe the bankruptcy problem is in the Navy.

D. AREAS FOR FURTHER RESEARCH

In conducting this study, the researcher noted several areas for further research which would assist in defining how severe the bankruptcy problem is in the Navy. These include the following:

- Repeat the sampling process at other bankruptcy courts around the country in an attempt to profile a typical Navy debtor for the whole Navy.
- Repeat the sampling process at the Jacksonville and San Diego bankruptcy courts for active duty Navy bankruptcy cases filed in years other than 1991. This will provide data which could be used to determine trends in the active duty Navy bankruptcy filing rate, as well as assist in the evaluation of the effectiveness of the PFM program.

- Using the researcher's data base and other resources available within the Department of Defense, conduct a study on the affect of bankruptcy on sailors performance in the Navy. Evaluations, retention data, and security classification data are examples of parameters which could be looked at.

- Conduct a survey of Navy personnel to determine the "normal" financial condition of sailors. The results of this survey could be compared against the researcher's bankruptcy results to determine how severe financial problems are in the Navy. In addition, the survey results could be compared with the civilian population to determine whether or not sailors are in better or worse financial health than civilians.

APPENDIX A

BANKRUPTCY DATA SHEET

VOLUNTARY PETITION / SCHEDULE I

1. CASE ____________________
2. DATE ____________________
3. FILSTAT ____________________
4. SSPDEBT ____________________
5. SSJDEBT ____________________
6. SEXP ____________________
7. CHAPTER ____________________
8. NATDEBT ____________________
9. NDEP AGES ____________________
10. MARSTAT ____________________
11. NYRNAVY ____________________
12. OFFENL ____________________
13. NBKR ____________________
14. RANK ____________________
15. CH13PYM ____________________
16. LAWY ____________________
17. LAWFEE ____________________

COMMENTS:

SCHEDULE B / ASSETS

18. CASH ____________________
19. BDEP ____________________
20. SDEP ____________________
21. HOUSGO (SPECIFICS)

22. CLOTH

23. JEWEL

24. COLLECT

25. AUTO

26. RECVEH

27. INVEST

28. VALINS

29. TAXREF

30. ASSETW

30A. ASSETWO

COMMENTS:

SCHEDULE E / PRIMARY DEBT

31. TAXIRS

32. TAXSTA

33. TAXOTH

34. TPRIMDBT

SCHEDULE D / SCHEDULE A / SECURED DEBT

35. HOMEOWN

36. HOMEVLU

37. HOMEMTG

38. HOMESMTG

39. HOMERNT

40. SHOMOWN

41. SHOMEVLU

42. SHOMEMTG

43. NAUTOLN

44. AUTOLN

45. SAUTOLN

46. OVHCLN

47. FURNLN

48. JEWELN

49. ENTERLN

50. APPLN

51. OTHERLN

52. TOTLNW

53. TOTLNWO

54. NSECCRD

COMMENTS:

SCHEDULE E / SCHEDULE F / UNSECURED DEBT

55. MEDDT

56. STUDT

57. NBNKCD

58. BNKCDDT

59. NDEPTCD

60. DEPTDT

61. NGASCD

62. GASCDDT

63. NOTHCD (Discover, Diners...)

64. OTHCDDT

65. NTOTCD

66. TOTCDDT

67. UTILDT 68. SCAMDT

69. OTHDT (auto repairs...)

70. SIGDT

71. SSIGDT

72. TOTUNSDT

73. LIABW

74. LIABWO

COMMENTS

SCHEDULE I / INCOME

75. SPEMP

76. NMOSPEMP

77. PDMONINC

78. SPMONINC

79. OTMONINC

80. TMONINC

81. NMONINC

COMMENTS:

SCHEDULE J (NEW BUDGET) / EXPENSES

82. GOVQTR

83. RENTEXP

84. MORTEXP

85. UTILEXP

86. TELEXP

87. HMNTEXP

88. CLOTEXP

89. MEDEXP

90. TRANEXP

91. AUTOEXP

92. STUFEXP (includes recreation expense)

93. LAUNEXP

94. CHAREXP

95. TINSEXP

96. ALIEXP

97. EDEXP

98. FOODEXP

99. OTHEXP

100. TMONEXP

101. EXCINC

COMMENTS:

STATEMENT OF FINANCIAL AFFAIRS

102. GIPDD

103. GIJDD

104. SRB

105. CHGIPD1

106. CHGIPD2

107. CHGIJD1

108. CHGIJD2

109. OTHGI12

110. GARATT

111. REPFOR

112. LOSS

113. MVMT

COMMENTS:

APPENDIX B

COMPUTER BANKRUPTCY DATABASE CODEBOOK

CASE	Court system case number
DATE	Month case filed in 1991 01 - Jan 07 - Jul 02 - Feb 08 - Aug 03 - Mar 09 - Sep 04 - Apr 10 - Oct 05 - May 11 - Nov 06 - Jun 12 - Dec
FILSTAT	Filing status 1 - Single 2 - Jointly 3 - Partner 4 - Other
SSPDEBT	Social Security number of primary debtor
SSJDEBT	Social Security number of joint debtor
SEXP	Sex of primary debtor 1 - Male 2 - Female
SEXJ	Sex of joint debtor 1 - Male 2 - Female
NATDEBT	Nature of debt leading to bankruptcy 1 - Consumer non-business 2 - Business
CHAPTER	Bankruptcy chapter filed under 1 - Chapter 7 2 - Chapter 13
MARSTAT	Marital status 1 - Single 3 - Separated\Divoced 2 - Married
NDEP	Number of children

OFFENL	Officer or Enlisted
	1 - Officer 3 - Chief Warrant Officer 2 - Enlisted 4 - Unknown
NYRNAVY	Number of years in the Navy
RANK	Rank of debtor

01 - E1	07 - E7	13 - O4
02 - E2	08 - E8	14 - O5
03 - E3	09 - E9	15 - O6
04 - E4	10 - O1	16 - O7
05 - E5	11 - O2	17 - CWO1
06 - E6	12 - O3	18 - CWO2
		19 - CWO3

NBKR	Number of prior bankruptcy cases filed
LAWY	Lawyer used to file
	1 - Yes 2 - No 3 - Self Help Legal Firm
CASH	Cash on hand
BDEP	Bank deposits of money
SDEP	Security deposits value
STEREO	Stereo equipment value
COMPUT	Computer equipment value
HOUSGO	Household goods and furnishings value
JEWEL	Jewelry and furs value
COLLECT	Books and collectibles value
AUTO	Automobile(s) value
RECVEH	Recreation vehicle value (campers, boats...)
INVEST	Government bonds, stocks, investments value
VINS	Insurance cash value

TAXREF	Expected tax refund value
ASSETW	Total asset value with houses
ASSETWO	Total asset value less houses
TAXIRS	Taxes owed to the federal government
TAXSTA	Taxes owed to the state government
TAXOTH	Taxes owed to other organizations
TPRIMDBT	Total of primary debt
HOMEOWN	Does debtor own a house? 1 - Yes 2 - No
HOMEVLU	Market value of house
HOMEMTG	Mortgage value on house
HOMESMTG	Second mortgage value on house
HOMETMTG	Third mortgage value on house
HOMERNT	If home owners, are they living there? 1 - Yes 2 - No
SHOMOWN	Does debtor own a second house? 1 - Yes 2 - No
SHOMEVLU	Market value of second house
SHOMEMTG	Mortgage value on second house
NAUTOLN	Number of automobile loans
AUTOLN	Amount of auto loan(s)
SAUTOLN	Source of auto loan(s) 1 - NFCU 2 - Dealer financing 3 - Other Bank 4 - Other

OVHCLN	Other vehicle loans (campers, boats...)
FURNLN	Amount of furniture loan
JEWELN	Amount of jewelry loan
ENCYLN	Amount of encyclopedia/book loan
ENTERLN	Electronic entertainment loan
APPLN	Major appliance loan
OTHERLN	Other secured debt value
TOTLN	Total of secured debt
TOTLNWO	Total of secured debt less mortgages
NSECCRD	Number of secured creditors
MEDDT	Amount of medical debt
STUDT	Amount of educational/student debt
NBNKCD	Number of bank credit cards (Visa, Mastercard,...)
BNKCDDT	Amount of bank credit card debt
NDEPTCD	Number of department store credit cards and merchants who sell on credit without using credit cards
DEPTDT	Amount of department store debt
NGASCD	Number of gasoline credit cards
GASCDDT	Amount of gasoline credit card debt
NOTHCD	Number of other credit cards (Discover, Diner's Club...)
OTHCDDT	Amount of other credit card debt
NTOTCD	Number of all types of credit cards
TOTCDDT	Amount of total credit card debt

SIGDT	Amount of signature loan debt
SSIGDT	Source of signature loan(s) debt 1 - NFCU 2 - Other Bank 3 - Finance Company 4 - Other
REPODT	Amount of debt owed on items repossessed or foreclosed on
TOTUNSDT	Amount of total unsecured debt
LIABW	Amount of total liabilities
LIABWO	Amount of total liabilities less mortgage debt
SPEMP	Is spouse employed? 1 - Yes 2 - No
NMOSPEMP	Number of months spouse employed
PDMONINC	Primary debtor monthly income from job
SPMONINC	Spouse monthly income from job
OTMONINC	Other monthly income
TMONINC	Total monthly income
NMONINC	Net monthly income
GOVQTR	Are debtors living in government housing? 1 - Yes 2 - No 3 - Unknown
RENTEXP	Monthly rental expense
MORTEXP	Monthly mortgage expense
GAELEXP	Monthly gas/electric utility expense
TELEXP	Monthly telephone expense
OTHUTEXP	Monthly other utility expense
HMNTEXP	Monthly home maintenance expense
CLOTEXP	Monthly clothing expense

MEDEXP	Monthly medical expense
TRANEXP	Monthly transportation expense
STUFEXP	Monthly expense for recreation, newspapers...
LAUNEXP	Monthly laundry expense
CHAREXP	Monthly charity expense
TINSEXP	Total monthly insurance expense
LIFINS	Does debtor have life insurance other than SGLI? 1 - Yes 2 - No 3 - Unknown
OTHTAEXP	Other monthly tax expense (not included in mortgage)
AUTOEXP	Monthly auto payment expense
ALIEXP	Monthly alimony expense
EDEXP	Monthly education expense
FOODEXP	Monthly food expense
OTHEXP	Monthly expense for other items not covered
TMONEXP	Total monthly expenses including rent or mortgage but excluding all other debt expense
EXCINC	Monthly excess income = TMONINC - TMONEXP
CH13PYM	Monthly Chapter 13 payment
LAWFEE	Lawyers fee for bankruptcy
GIPDD	Did primary debtor's gross income decrease in bankruptcy was filed? 1 - Yes 2 - No
GIJDD	Did joint debtor's gross income decrease in year bankruptcy was filed? 1 - Yes 2 - No

SRB	Is their indication of a reenlistment bonus being paid in the two years preceding bankruptcy? 1 - Yes 2 - No
CHGIPD1	Change in primary debtor's gross income between year bankruptcy was filed and previous year(1)
CHGIPD2	Change in primary debtor's gross income between year bankruptcy was filed and previous year(2)
CHGIJD1	Change in joint debtor's gross income between year bankruptcy was filed and previous year(1)
CHGIJD2	Change in joint debtor's gross income between year bankruptcy was filed and previous year(2)
OTHGI12	Other income received during two years preceding bankruptcy (non employment related)
GARATT	Has property been attached, garnished, or seized within one year of filing bankruptcy? 1 - Yes 2 - No
REPFOR	Has property been repossessed by a creditor, sold at auction, or returned to seller within one filing bankruptcy? 1 - Yes 2 - No
LOSS	Has debtor experienced losses from fire, theft, gambling, investments, or other casualties which total greater than $500 within one year of filing bankruptcy? 1 - Yes 2 - No
MVMT	Has debtor moved within the last two years preceding the filing of bankruptcy? 1 - Yes 2 - No

Notes:

(1) The researcher used missing values for data elements as required to facilitate data analysis

(2) These are the variables that the researcher had initially hoped to find in the bankruptcy cases. However, when sampling it was found that not all the bankruptcy cases provided this data. For several of the variables, data was not available in sufficient quantities to analyze.

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